LABOUR INVESTIGATION COMMITTEE GOVERNMENT OF INDIA



REPORT

ON

AN ENQUIRY INTO CONDITIONS OF LABOUR IN THE MATCH INDUSTRY IN INDIA

BY

S. R. DESHPANDE

Printed by the Manager, Government of India Press, Simla 1945

Price: Re. 1 As. 4 or 2s.



CONTENTS. Pages ... (ii)List of Appendices (iii) List of Tables ... (iv) Preface (vii) Acknowledgments PART I. CHAPTER I—INTRODUCTION Historical and Economic background. Location and extent of the Match industry. Scope of the Enquiry. Processes involved in the manufacture of matches. PART II. Employment, REGIONAL SURVEY OF LABOUR CONDITIONS-Working conditions, Hours of work and Shifts, Wages and earnings, Housing and Welfare work. (i) BRITISH INDIA. 9-16 Chapter II-Bengal 17-26 Chapter III-Bombay 27 - 33Chapter IV-A. Madras 34 - 39B. Ramnad 40-45 Chapter V-Assam 46-50 Chapter VI-United Provinces 51 - 54Chapter VII-Punjab 55-59 Chapter VIII-Central Provinces (ii) INDIAN STATES. 60-63 Chapter IX-Mysore . . 64-65 Chapter X-Baroda PART III. 66-75 Chapter XI.—SUMMARY AND CONCLUSIONS 76-86 Appendices 87



Select Bibliography

LIST OF APPENDICES.

- I. Statement showing the number of Match Factories in British India and the number of persons employed in them from 1931 to 1943.
- II. Statement showing piece and minimum time-rates of workers in the WIMCO Factory at Tiruvattiyur, Madras.
- III. List of commodities supplied to workers at pre-war prices in the VIMCO Factory at Tiruvattiyur, Madras.
- IV. Appendix containing the Tenancy Agreement in respect of housing supplied to workers of the WIMCO factory in Tiruvattiyur, Madras.
- V. Statement showing the wages of workers (excluding allowances) in February 1939 and February 1945 in the Assam Match Co., Ltd.
- VI. (a) and (b). Frequency Table showing wages and earnings in the Match Factories covered by the Wage Census in eight Centres.



men aft ve bound arriver to see a con-

LIST OF TABLES.

- I. Table showing the imports of matches into India from 1926-27 to 1943-44.
 - II. Table showing the distribution of match factories in India in 1939.
- III. Table showing the Excise Revenue from Indian matches for the years 1941-42, 1942-43 and 1943-44.
- IV. Table containing the details of Match Factories covered for purposes of ad hoc survey.
- V. Table showing wages and earnings in selected occupations in five Match Factories in Bengal.
- VI. Table showing wages and earnings in selected occupations in the Match Factory at Ambernath, Bombay.
- VII. Table showing wages and earnings in selected occupations in the Bombay Match Works, Kurla, Bombay.
- VIII. Table showing wages and earnings in selected occupations in the WIMCO factory at Tiruvattiyur, Madras.
- IX. Table showing the frequency (a) of wages and (b) of earnings in two match factories in Sivakasi, Ramnad district, Madras.
- X. Table showing wages and earnings in selected occupations in the National Match Works at Siyakasi.
- XI. Table showing the maximum and minimum wages (excluding illowances) in February 1945, in selected occupations in the Assam Match Co., Ltd.
- XII. Frequency Table showing wages and earning in the Match Factory at Bareilly, United Province.
- XIII. Frequency Table showing wages and earnings in the three Match Factories covered in Lahore, Punjab.
- XIV. Frequency Table showing wages and earnings of workers in the two Match Factories covered in Chanda and Kota, Central Provinces.
- XV. Table showing wages and earnings in selected occupations in the Match Factory at Shimoga, Mysore State.
- XVI. Summary Table showing frequency of wages and earnings in the Match Factories surveyed.
- XVII. Summary Table showing percentage of workers housed by the employers in the Match Factories Surveyed.

teacite, engineering, treasport space PREFACE: teauspire, teauspire,

The Tripartite Labour Conference at its meeting in September 1943 recommended the setting up of machinery to investigate questions of wages and earnings, employment and housing, and social conditions generally, with a view to provide adequate materials on which to plan a policy of social scurity for labour. In pursuance of that resolution, the Labour Investigation Committee was appointed by the Government of India by Resolution No. L 4012, dated the 12th February 1944 to carry out the investigations. The Committee was instructed to extend its investigations generally to all industrial and semi-industrial labour covered by the Royal Commission on Labour in their Report, with the addition of certain other categories. The Committee was asked by the Government of India to decide in each case the most suitable manner of conducting the enquiry. The Government, however, considered that the method of enquiry should not merely consist of sending out questionnaires to Government agencies and Employers' and Workers' Associations, but should also comprise specific enquiries in individual concerns based on representative sampling.

- 2. In India, in spite of the quite comprehensive enquiries made by the Royal Commission on Labour and a few Committees appointed by the Provincial Governments, there have remained large lacunae in regard to information on labour conditions in several industries. In particular broadly speaking, the method of direct enquiry on the spot has not been adopted on a sufficiently wide scale so as to cover the entire industrial structure. Moreover, certain industries, like cotton textiles and coal mining, have received greater attention than others, and even as regards these industries, comprehensive information on an all-India basis has not been available. With a view to making up this deficiency as well as to bringing the available information up to date, the Committee decided that an noc surveys should be carried out in various industries so as to secure a complete picture of labour conditions prevailing in each. The following industries were selected for the purpose:—
 - A. Mining. (1) Coal. (2) Manganese. (3) Gold. (4) Mica. (5) Iron Ore. (6) Salt.

B. Plantations. (7) Tea. (8) Coffee. (9) Rubber.

- C. Factory Industry. (10) Cotton. (11) Jute. (12) Silk. (13)(14) Mineral Oil. (15) Dockyard. (16) Engineering. Woollen, (17)(18) Matches. (19) Paper. (20) Carpet weaving. (21) Coir Cement. matting. (22) Tanneries and Leather Goods Manufacture. (23)(24) Printing Presses. (25) Glass. (26) Chemical and cal works. (27) Shellac. (28) Bidi making. (29) Mica Pharmaceutical works. (30) Sugar. (31) Cotton Ginning and Baling. (32) Rice Splitting. Mills.
- D. Transport. (33) Transport Services (Tramways and Buses). (34) Non-gazetted Railway Staff.
- E. Other types of labour. (35) Port Labour. (36) Municipal Labour. (37) Central P.W.D. (38) Rickshaw Pullers.
- 3. The main conception on which the ad hoc surveys have been based is that information should be collected on the spot by direct enquiry conducted with the help of the Committee's own staff and that this information should, as far as possible, conform to the sampling methods widely adopted in such work. Owing to great variations in the character of the different industries, however, there could not be a complete uniformity in regard to the methods which had to be adopted to suit the peculiarities of particular industries and centres. For instance, while there are only a few centres and units in certain industries such as potteries, mineral oil, gold, etc., in other industries, such as

textiles, engineering, transport services, plantations, tanneries, bidi-making, etc., a very large number of centres and units in different provinces (and even States) had to be covered. Moreover, some of the industries are modern industries of the large-scale type, wherein factory legislation applies more or less entirely, while others are indigenous handicrafts or small-scale industries, where factory legislation is either inapplicable or partially applicable. Thus, information has not been uniformly available in advance as regards the size, location and ownership of industrial units, such as is necessary before decisions for sampling are taken. Consequently, the technique of representative sampling had to be modified and supplemented so as to obtain whatever information of a reliable character was available. As far as possible, however, in all industries important centres were covered. In each of these centres units were chosen on a sample basis, but it was possible in a few centres to cover all units. The final lists of centres of survey and individual establishments were made out in the light of the impressions gathered during the course of the preliminary tour and in consultation with local authorities. The guiding principle in the selection of centres of survey was to make the survey regionally representative so as to discover differences in the conditions of labour in the same industry in different parts of the country. The selection of individual concerns was generally based on considerations, in order of importance of (a) size, (b) ownership (private or limited) and (c) whether subject to statutory regulation or not. In this connection it may be stated that the Committee were greatly handicapped in sampling the units owing to the lack of complete information regarding location and number of units in the selected industries. Unfortunately there are no all-India employers' organisations in some of the organised industries, nor are the statistics maintained by the Central and Provincial Governments at all complete. Moreover, in certain unorganised industries, such as shellae, carpet-weaving, bidi-making, etc, owing to their very nature, no such information could have been readily available in advance. In certain cases, therefore, owing to these difficulties as well as transport difficulties and other exigencies, the sampling could not be fully adhered to. Nevertheless, the Committee have been anxious to gather in the maximum possible information in the limited time at their disposal and with a view to this, rney have cast their net as wide as possible. The main instruments of the ad hoc survey were the Questionnaires. These were of two kinds :- (a) the main ad hoc survey questionnarie on points likely to be common to all the industries surveyed, and (b) supplementary and special questionnaires in respect of certain industries. sucl as plantations, mines, railways, rickshaw pullers, port labour, municipal labour, glass, shellac, mica, etc. The main questionnaire was accompanied by a tabular form for entering wage data and this was used wherever possible. In the case of certain surveys, however, such as salt, paper, cottons, woolien and jute textiles, dockyards, silk, cement and gold mining, it was possible to conduct a wage survey on a sample basis. The chief method of collection of data was by personal investigation of industrial establishments, examination of their records and contact with labour in factories and homes. The information thus sollected was supplemented and checked with replies to the Questionnaires received.

4. For the purpose of conducting enquiries, a sufficiently large field staff. consisting of 16 Supervisors and 45 Investigators, was appointed. Before the commencement of field work, all the Supervisors (with the exception of those working in Bengal) were called to the Committee's headquarters at Simia and given detailed instructions on the technique and scope of the enquiries to be anducted by them, the manner in which they were to submit their data, and the centres and units which they were to investigate. In addition, both Supervisors and Investigators were provided with written instructions regarding the

use of questionnaires, sampling of concerns (where this could not be done in advance), filling of the wage forms, etc. In particular, they were asked not only to collect information on the spot but also to draw upon every other possible source of information. In doing so, they were required to distribute copies of the questionnaires in the centres assigned to them not only amongst the sampled and such other associations and individuals as were likely to be interested in units but, also amongst employers' and workers' associations in the industry the subject. They were also asked to get into touch with officials of Central and Provincial Governments connected with labour and obtain such facilities as might be necessary in doing their work.

- 5. As far as the field work in Bengal was concerned it was done by the staff of the Committee under the guidance and supervision of the Labour Commissioner, Bengal, and his subordinate officers. Members, however, paid visits to selected centres and units in Bengal to obtain first-hand knowledge of local labour conditions
- 6. The Committee's survey covered all Provinces with the exception of the North West Frontier Province where none of the Industries selected for survey was sufficiently important. It extended to many of the Indian States also, such as Kashmir, Patiala, Gwalior, Baroda, Mysore, Sandur, Travancore, Cochin, Bundi, Indore and some of the States of the Eastern States Agency. No survey was undertaken in the Hyderabad State as that State preferred to appoint a Labour Investigation Committee, with terms of reference identical to those of this Committee, for enquiry into local labour conditions.
- 7. In dealing with the ad hoc survey work, several courses were open to the Committee —(i) that the Committee, as a whole, to study each industry, (ii) that the surveys to be distributed region-wise and each Member put into charge of a region, and (iii) that each Member to be entrusted with a few surveys throughout India. With a view to speedy and efficient work, the third course was actually adopted. This departure from the usual procedure of the Committee as a whole dealing with the work was necessary in view of the immensity of the task and the necessity of maintaining an all-India perspective. Moreover, it was felt that this procedure would enable Members to make a specialised study of labour conditions in individual industries in different parts of the country. It was also felt that the peculiar problems of industrial labour had more an industry-wise than a region-wise dispersion and that the procedure would be helpful to future legislation which has to take into consideration the diversified conditions of each industry. It will be seen, however, that in the Reports the factual material has been presented both on an all-India and on a regional basis.
- 8. Thanks and acknowledgments are due to Provincial Governments, State, Authorities, Labour Commissioners (and particularly the Labour Commissioner, Bengal), Directors of Industries, Chief Inspectors of Factories, Port authorities, local bodies, employers' and workers' associations, managements of the units surveyed and all others who rendered help in the collection of the data presented in these Reports.

D. V. REGE, Chairman.

8. R. DESHPANDE AHMAD MUKHTAR B. P. ADARKAR

Members

use of questionmakes shouther a concress white this could not be due in chiracter), filling of the wage letter six particular, incy were alkad not only to edilor manages on the wage has seen to distribute the particular of information. In door we have the property were required to distribute copies of two questions are the restorements of the restorement of the editor only analysis of the copies of and such a seen after a secondary and individuals a seen their to be information at the sample of the particular of the secondary of the states and the states of the states and the states are the states and the states and the states are the states

something to meressing in doing their work;

5. As far as the field work in Hengal was concerned it was done by the staff of the Committee upder one supervisors of the bacour Comme and Brogal and his subordinary choices. Members however put water as subsected contres and must be bacour or obtain distributed newtoning and contres and the start of the first conditions.

A like to puriture a servey covered all browness with the exact ten of the start of the transfer of the transfer of the transfer of the transfer of the start of

ACKNOWLEDGMENTS.

In the absence of much written material, either published or received from the interests concerned, the data required for the preparation of this Report had to be collected by the Supervisors and Investigators of the Committee and my thanks are due to them for the thoroughness with which they carried out the duties entrusted to them. I am also indebted to Mr. S. Sundgren, Managing Director of the Western India Match Co., Ltd., for his assistance throughout the enquiry. Mr. S. R. Sundaram, one of the Supervisors of the Committee, rendered invaluable help in checking the facts and figures contained in this Report.

ex Thanks and schrouls ignerals are due to floringial deveraged. State in housing the labour to consider the labour the labour to consider the labour the labour to consider the labour the labour to consider the labour t

Constant value of the constant value of the

SINGH SAHNI,

arrest hereast

CHAPTER I.-INTRODUCTION.

Historical and Economic Background .- Before the outbreak of the first world-war (1914-18), the match industry as a factory industry hardly existed in this country. Some attempts were no doubt made, from time to time, to manufacture matches by small capitalists working on a cottage basis with indigenous wood. But the quality of the matches produced was poor and the major portion of India's consumption of matches was met by imports from Sweden and Japan.

"The first match factory which still survives is the Gujarat Islam Match Factory which was founded at Ahmedabad in 1895 under Indian management*." The growth of the match industry in India in an organized form, however, dates from the year 1922 when a revenue duty of Rs. 1-8-0 per gross was imposed on imported matches at a level which afforded substantial protection to the home industryt. As a result of the duty, the indigenous industry began to make rapid progress. The duty also induced small capitalists in India to manufacture matches on a large scale and many factories were estabilished especially in Bengal and Madras. During the early stages of the development of this industry, however, almost every process of manufacture was carried out by hand and hand-driven machines. Gradually, prospects offered by the industry for large scale production began to realized and in the year 1923 some big factories were established!. By the year 1926, "a large proportion of India's total consumption of abount 18 million gross per annum began to be catered for by manufacture within the country §." The figure of imported matches which was 18.3 million gross in 1915-16 came down to 6.13 million gross in 1926-27. The foreign exporters, especially, the 'Swedish Match Company' could not stand the competition from the new home industry and during the years 1924 and 1925, themselves established factories in India . The Company is now styled the 'Western India Match Company Ltd.' and has factories at Ambernath, Bareilly, Calcutta, Madras and Lahore. It has a virtual monopoly of match production in this country and meets nearly 80 per cent. of the demand . It has to face no foreign competition because as will be seen from the following statement, as compared to 1926-27, imports into India have dwindled to almost a negligible quantity.

PTT			-	-
TA	RI	F		

Year.								Imported matches (in million gross)
1926-27					.1 2100	100	Ditta	6 · 1 **
1927-28					12.50			3.5
1928-29	3 (13) (8)	il ann or						1.5
1940-41	THE MANY	A Victor	ant an					1.9
1941-42	di Liver	Paril.	therin	9916.	nufficial St		OFF.TH	0.68+
1942-43							51.0	0.21
1943-44								0.028

^{*&#}x27;The Indian Match Industry' by L. P. Sinha. Published in 'Capital'.

t' The Location of Industry' in India—p. 46...
t' The Indian Match Industry.' Article in 'Capital'.
the Match Industry in India'. Article contributed to the 'Dictionary of Economic Products and Industrial Resources of India' by the Western

India Match Co. Ltd., Bombay.

Report of the Indian Taviff Board regarding the grant of Protection to the Match Industry, 1928. P. 5.

I'The Match Industry in India'. WIMCO'S article.

[†] Sea-borne Trade of India, March 1945.

Location and Extent.—The growth of the match industry since the revenue into was imposed has been phenomenal*. In 1921 there were only 2 match factories in the country employing about 400 persons, but by 1939 their number rose to 113 and the number of workers employed was 16,220. The following table shows the distribution of the factories in 1939 according to the various Provinces and States†:—

TABLE II.

British India.		No. of factories,	No. of workers
British India	erigenie einder dieb	ingreb Literary in	Isom Call
Bombay	Tending and the first	ere and a 7 diseitar	2264
C. P. & Berar	version Said Rollman, ov.	I The said of the said of	111
Madras	· · · · · · · · · · · · · · · · · · ·	. 53	3389
Bengal		. 14	4695
Assam	The state of the s	. 3	595
U.P	an a sale tridenti	. euten 4 1 of no	1052
Punjab	the will be well the		367
States.			
Baroda		. 2	575
Gwalior	CHALL SECTIONAL DINE	. 1	75
Kashmir	nowever, simust e	S. Dennis Isin fo	71
Bombay States	or povirtishasa ba	. 10	1421
Travancore	· fire head water	. 2	248
Mysore		. 1	25
Rajputana—Kota		. 1	160
Hyderabad	THE PERSON TO	. 10	1172
of stilling oursestmann within the	n be onloyed for in		
	Total .	. 113	16,220

As there is no all-India Match Manufacturers' Association in the country, it is difficult to give a precise idea of the present location of the industry and the number employed. Nor were the All-India Emyloyers' Associations able to assist in this matter. Through the courtesy of the Western India Match company, however, an estimate of the number of match factories and the number of workers employed in them has been obtained which shows that there are in India (inclusive of Indian States) about 150 Match factories employing about 16,000 workers. Of the latter, over 6,000 are employed by the WIMCO and their sister Match Company, the Assam Match Company Ltd., Dubri. According to information supplied by the Central Board of Revenue about 100 of these match factories are situated in British India.

A table showing statistics of match factories in British India from 1931 to 1943 will be found in Appendix I.

As these figures relate to British India, they do not present a correct position of the geographical distribution of the industry. Even so it is clear that so far as the number of factories is concerned, Madras heads the list with as many as 67 factories.

As has already been stated, in the early stages of its development, the industry was partially run as a cottage industry which provided work principally to women and children in their own homes. It is within the experience of the writer to have witnessed the decay and death of this cottage industry in Bombay Province and probably the same has happened elsewhere in the country. In South India, even today in two towns near Madura, namely Sattur and Shivakashi, the industry is providing work to hundreds of families in their own homes. These two are virtually match towns, a large pro-

^{*} Article on 'Indian Match Industry' in 'Capital'.

j 'The Location of Industry in India, Pages 48 to 50 '.

portion of the population drawing their sustenance from the industry, partially in their homes and partially in the factories.

The dearth of up-to-date statistics relating to the Match industry has already been commented upon. It would, however, appear from the available statistics* that both from the point of view of the number of units as also the number employed, Madras is the largest centre having more than sixty factories and employing over three thousand persons. The Province of Bengal is the next in importance closely followed up by Bombay.

There is little heavy machinery required for match manufacture and the processes are mostly simple in character as will be seen from subsequent paragraphs, although there is sufficient scope for individual skill and dexterity. Some of the plants, notably those of WIMCO, are highly mechanised, while in the smaller units of the industry, beyond the employment of a few gadgets, the whole work is done by hand.

The size of the units varies from a handful of employees as in some concerns in South India to about a thousand employees. In no factory does the number employed exceed 1,100.

Although, from the point of view of the number of persons employed, the match industry cannot be regarded as one of the principle industries in the country, its importance from the point of view of its contribution to the State revenues is very considerable as will be seen from the following figures of Excise Revenue from Indian matches:—

TABLE III.

			Rs.
1941-42	 		 2,90,37,043
1942-43	 		 3,31,87,173
1943-44		• 9	4,70,48,166

Scope of the Enquiry.—For purposes of the present enquiry 20 factories were covered.—In these an intensive ad hoc survey was made and a wage census was also conducted. The following statement contains details of the factories covered:—

TABLE IV.

	Name of the Prov	ince/State	э.		of factories overed.	Total No. of workers employed.	
and the state of	(1)			(2)	(3)	
1	Bengal				5	2,412	
	. Bombay				3	1,497	
	. Madras	The same of			3	1,332	
4	. Assam				1	1,001	
5	United Provinces				1	1,078	
	. Punjab				3	385	
	. Central Province				2	199	
	Mysore State, (SI		the second		ī	250	
9	Baroda State,	illioga)	STEE STEEL		î	230	
			Total	eniti is	20	3,384	

It will be seen that all the important centres of the industry have been covered by the present survey and information obtained about the conditions of work and wages of 52.5 per cent. of the total employed in the industry.

Processes.—It may be of interest to describe here briefly the various proresses involved in the manufacture of matches. Wood is the chief raw material required. It has to be of a special soft variety. During the early years of the industry in India most of the wood was imported from abroad. But due to prohibitive cost early steps were taken to explore possibilities of finding local substitutes and as a result of several experiments the wood known as Bombax Malabarium was found. It is available in the heavy forests of Burma, Bengal, Assam, United Provinces, Central Provinces, Parts of Gujrat and Malabar.

Chlorate of Potash and Red (amorphous) phosphorous are the two most important chemicals needed. Several others are made use of both for the head of the splint as also for friction composition of box edges. Glue is used for binding all these chemicals togther. Paraffin, heated to a high temperature, is used for dipping splints in order that the wood may catch fire without difficulty.

Paper used for making the boxes is usually blue in colour and is available in rolls cut into strips of required size for use in wrapping inner and outer

box veneers.

The quality of the machinery used at present by some of the progressive factories in India compares very favourably with that used in the West.

The story of the manufacture of a box of matches—from the log of wood to the finished box—makes interesting reading. The logs would have to be of the necessary measurements and quality. They are then cut into required sizes by saws which are electrically driven. The wood has to be cut for making the match stick on the one hand and the match box on the other.

From the power-saws the logs are moved on to the peeling These machines, as their name indicates, peel off from the log billets thin layers and as these layers come out of their respective machines further cut with a view to making them suitable for use in the component parts of the box—the inner and the outer. They are simultaneously dented by lancets in order to facilitate their folding into proper shapes by the boxmaking machines. The next stage is the chopping machine; it chops oblong pieces from the strips for outer boxes and narrow pieces for the rims and small pieces to form the bottom of the inner boxes. These are now moved into the box-making department and put into their respective machines. The outer box machines fold the strips along the lancet marks and strips of blue paper are automatically wrapped round the box, the paper having been previously pasted. The inner box machines work on identical lines and in both cases the finished article is automatically thrown out into trays placed to receive them. These inner and outer boxes are now passed through steamheated chambers and are completely dried. They then go to the box-closing machines where the inner and outer are jointed together into a complete box. The boxes are now passed on to the box-filling department, there to await the arrival of the finished match sticks.

The peeling machines peel off considerably thicker billets for the purpose of the match stick. The splint-veneer strips are put through the splint-chopping machines which cut them into several hundred splints per minute. Then the splints are dried and polished by rotating drums. The next stage is when these splints are passed through sieves in order to remove uneven and defective sticks. The good ones remain over and fall on an oscillator which fills them into a frame so that they lie in orderly stacked rows. An Assistant removes the filled frames from time to time and transfers them to aluminium trays where they lie packed "end on". They are now despatched to the "continuous machine" department. The invention of this machine marks an important land mark in the industry. Because of this machine the dipping of the splints, firstly in hot paraffin and then in the chemical head composition is now done automatically. "The metal trays packed with splints

are loaded into the machines which transfer them to an endless conveyor band punched with numerous holes, one for each splint, which is automatically rammed and sticks out at right angles to the band. Once secured the bristling rows of splints are carried slowly forward through the body of the apparatus and dipped, first in a super-heated paraffin bath and then in a shallow trough of viscous head-composition. When the sticks have been dipped they travel on with the conveyor to a drying machine and there the heads set and harden. They are delivered ultimately in trays as they went in ".*

In the box-filling department, the work of opening the boxes, filling them and closing them is performed by the box-filling machine. The boxes now need the labels, and the banderols of the Excise Department and the striking surface. Labelling and banderoling are done mechanically and side-painting by circular brushes. A final drying process follows and the match boxes are complete. They go to the packing department and are suitably packed for despatch.

The above is a description of the processes in an up-to-date and highly mechanised factory. There are, however, numerous match factories in India where the manufacture is carried on only partly with the help of the machine. In such factories there are no power-saws and most of the other operations such as box-making, mach-filling, banderoling, labelling, etc. are also done by hand. Besides the enormous waste of time, some of the processes involve work of an arduous and sometimes of a dangerous character.

PART II.

REGIONAL SURVEY OF LABOUR CONDITIONS (I) BRITISH INDIA. CHAPTER II.—BENGAL.

The match industry in Bengal dates back to the early years of this century although the first match factory on modern lines was not started there till the year 1923. Thereafter, it made rapid progress till the year 1936 when there were 20 match factories in Bengal employing over 5,000 persons. During the present enquiry, however, it was found that there were only 7 units working in the province, 5 in the Calcutta industrial area and 2 in Dacca, although the latter were reported not to be working regularly. Two of the units in the Calcutta industrial area and those at Dacca have very little machinery and most of the work is actually done by hand. The WIMCO match factory at Calcutta has been completely mechanised, while the other two units in Calcutta are partially so.

Employment.—Two of the five units surveyed in Calcutta employ about 82 per cent of the total employed in the match industry in Bengal. In the three other units employment as compared to the pre-war period has diminished owing to the difficulty of obtaining raw materials, chemicals, etc. The labour is generally employed direct except in one case where occasional contract labour is employed. The total number of persons employed in 1944 in the five factories covered was 2,412. In the WIMCO Match Factory no women are employed while, in the other four factories women and children are employed mostly in the box-filling and box-packing departments. It is reported that in some of the factories an appreciable number of children are found working.

About 57 per cent of the workers employed in these factories are time-workers and the rest piece-workers. In the WIMCO Match Factory, however, the majority of the workers are on the piece-rate basis. Only one of

^{*}The above description is partly based on a note supplied by the Head office of the WIMCO.

the factories classifies workers as permanent and temporary. A temporary worker is made permanent after a month's approved service when he is given a permanent card. Permanent workers on piece-rate basis are allowed 6 days' leave in a year, while monthly-rated workers are allowed 14 days' leave with pay in a year. In two of the factories all the workers are recruited as permanent while, in the other two all are recruited as temporary. The labour turnover in the industry is pretty high due probably to the unattractive conditions of service.

An analysis of the length of service of the workers shows that 59.6 per cent had been working in the same unit for less than one year, 14.9 per cent between 1 and 5 years, 18.3 per cent between 5 and 10 years and only 7.2 per cent over ten years. Out of the last category, however, nearly 7 per cent were from the WIMCO Match Factory where the labour turnover does not appear to be high.

As the processes in a match factory are not very complicated there is no system of apprenticeship in this industry in Bengal. Recruitment is generally made from persons offering themselves for employment at the factory gates.

Working conditions.—On the whole, possibly with one exception, from the point of view of sanitation and cleanliness, the working conditions in these factories are satisfatory. Except in the case of one factory where the workers are required to go to the streets for drinking water, proper arrangements are made for the supply of drinking water in others and in fact the WIMCO Match Factory gives iced water to all its employees during summer months. There is also adequate provision for latrines in these factories. Except in one of these factories where the sanitation is very good, in all other factories the latrines are kept in a very insanitary condition.

Hours of work and Shifts.—All the units work only a single shift per day except that a double shift is worked in certain departments, such as peeling and continuous departments, when there is pressure of work. The hours of work are between 7 and 7-30 a.m. to 5 and 6 p.m. In one factory the workers are given rest interval of 2 hours, while in the Western India Match Factory the workers have to put in 10 hours a day.

The WIMCO Match Factory used to work a 53½-hours week with only 6 bours' work on Saturdays. Recently, however, they are working a 60-hour week. Frior to September 1944, for every hour of work over 54 hours workers were paid 50 per cent more for each hour upto 60 hours, but since 1st September 1944, the rates have been increased to 100 per cent i.e. for every hour of work over 54 hours the workers are paid wages for 2 hours. In another factory where occasional overtime is worked the workers are paid only according to the provisions of the Factories Act. There have been complaints that in some of the match factories other than the WIMCO, overtime is occasionally worked and not paid for.

Wages and Earnings.—Since the outbreak of the War there has, on the whole, been little change in the basic wages of the workers in these factories. Only two of the units reported changes in the basic wages mostly of coolies varying from 66 to 200 per cent: this was due to the very large increase in the demand for unskilled labour. There is no system in the industry of giving any time-scale promotion, but increments are occasionally given according to the efficiency of the workers and at the discretion of the management.

A wage census was undertaken in all the five units for the different wage periods in the month of January 1944 and the following table gives the results of the census for important occupations:—

Table showing wages and earnings in selected occupations in five match factories covered by the Wage Census in Bengal.

	03	cupation.			Shift.	Sex.	Piece or * Time rate.	No. of hours or work per shift.	No. of workers.	No. of samples taken.	Average daily basic wages earned.	Average daily gross earnings including overtime allowances and bonuses.	Average daily net earnings including overtime allowances and bonuses.
			9 9								Rs. a. p.	Rs. a. p.	Rs. a. p.
Peeling machine of	perator	RMT			Gen.	Male	P. & T.	9, 91	58	37	1 8 6	2 0 5	2 0 5
Dippers .					,,	,,	,,	9	15	13	0 15 8	1 0 19	1 0 10
Box-fillers					,,	,,	P	9	192	192	0 10 2	0 14 8	0 14 8
					,,	Female	,,	9	52	52	0 7 0	0 10 4	0 10 4
品品 图图		10 年			,,	Child	,,	9	6	6	0 7 10	0 9 10	0 9 10
Packers					"	Male	"	9	9	9	0 10 10	0 12 9	0 12 9
				8 1	,,	Female	P.	9	75	75	0 7 1	0 10 1	0 10 1
Carpenters			1.5		,,,	Male	Т.'	9	51	51	1 5 2	1 11 7	1 11 7
Drivers					Day	,,	,,	91/2	1	1	1 10 0	2 0 9	2 0 9
Banderoling		14.24	4				98			B 2 8 8	48.5	24	111.6
Machine operator			1.50		Gen.	"	Р.	91/2	15	15	1 5 0	1 11 2	1 11 2
							THE PARTY	Total	474	451			

As the number of working days as also the hours of work differ from unit to unit it was not possible to arrive at figures regarding monthly wages and earnings. However, the table clearly shows that in certain skilled occupations, such as Peeling Machine Operator, Banderoling Machine Operator, etc., the workers earn a fairly high wage. On the other hand, in such large occupations as the box-filling department, the average daily basic wage is about 10 as. only, the average daily earning being 14 as. 8 ps. Female labour in the Packing Department seems to get as low a daily wage as 7 as. with an average earning of 10 as. 1 p. per day. The frequency table* of the earnings of the operatives in these 5 units seems to show that in the case of more than half the workers, the average daily wage is less than a rupee, while the average daily earning is less than Rs. 1-4-0.

Dearness allowance.—Three out of five factories surveyed are paying dearness allowance to all their workers. The other two which are not paying dearness allowance have increased the basic wage especially of unskilled workers. There is extreme diversity in the scale of the dearness allowance paid as between unit and unit. Alhough generally dearness allowance is calculated on the basis of days worked, in some units no such allowance is paid for a whole week if the worker is absent even for one working day. The following are the rates at which dearness allowance is being paid in the three units.

UNIT I.

Earnings upto Rs. 19
Earning between 20 to 25
Earnings between 26 to 50
Earnings between 51 to 80
Earnings between 80 to 150

Rs. 0-6-0 per rupee.
Rs. 0-5-6 per rupee.
Rs. 0-5-0 per rupee.
Rs. 0-4-6 per rupee.
Rs. 0-4-0 Per rupee.

The maximum dearness allowance payable is fixed at Rs. 37-8-0. Further, wages plus dearness allowance, plus concession for grains cannot be allowed to exceed Rs. 300-0-0.

UNIT II.

Annas 2 per day to piece and time-rated workers, and Rs. 5 to Rs. 12 to monthly-rated workers. The same rate of allowance is in operation since 1942.

UNIT III.

The dearness allowance is paid to all workers at the rate of annas 4 per day. The supervisory and clerical staff who are monthly-rated are paid at the rate of 50 per cent of their pay.

Bonus.—Only one of the units viz. the WIMCO Match Factory has given a profit bonus to all its workers. It paid in 1941, half a month's pay and in

1942 and 1943, two months' pay.

Fines.—Only one out of the five units reported that it imposed fines on the workers for late attendance, absence without notice, damage to tools,

serious misconduct, etc. No fines are imposed in other factories.

Leave with Pay.—Except the WIMCO Match Factory no other concerns give their workers a paid holiday or any privilege or earned leave. In the WIMCO Match Factory permanent workers on piece-rate basis are given 6 days' leave with pay in a year, while monthly-rated workers are given 14 days' leave with pay in a year. Sunday is usually observed as a closed holiday, and in addition, the factories remain closed on important Hindu and Muslim festival days.

Housing.

The Western India Match Factory has made arrangements for housing some of their labour but these quarters have now been requisitioned by the

Military authorities. The other factories provide housing for certain members of their staff, such as, darwans and sweepers but there is no housing provision made for the ordinary operatives. Most of the workers live in bustis round about the factories. These consist of single detached huts made of mud and bamboo walls and thatched roof or are single-room tenements with roofs of corrugated iron sheets. The monthly rent varies from Re. 1 to Rs. 2. There is no drainage and there are only common latrines and taps. The condition of housing is unsatisfactory.

Welfare Work.—Two of the five concerns have dispensaries of their own and have engaged qualified doctors and compounders. In the WIMCO Match Factory all the workers are medically examined before being admitted to the factory. It is reported that at these dispensaries only ordinary medicines are available and for any special treatment the workers have got to incur expenditure themselves. None of the factories has made any provision for schools for the children of their operatives. One factory has two canteens, one for Hindus and the other for Muslims, which are run by contractors. In the WIMCO Match Factory all the workers are given a cup of tea free of charge every day.

Grain Shops.—Three of the factories including the WIMCO Match Factory have opened grain shops for the workers. The WIMCO's sell food stuffs below the control rates, while two of the units sell the articles at the control rates only. In two units no provision has been made for supplying any food stuffs to the workers.

Provident Fund.—Only one concern viz. the WIMCO Match Factory has a provident fund but it is open to monthly-paid staff only. Thus, none of the factories appears to have made any provision for the future of their operatives.

General observations.—The workers in this industry are not well organised and have no powerful Trade Unions. None of these factories has employed a Labour Officer, although in the WIMCO Match Factory there is a Workers' Committee elected by the workers themselves by open ballot. It is reported that in some of the match factories children under 12 years of age are employed and as the number of Factory Inspectors in Bengal is not adequate such cases are not easy of detection. There have also been complaints of evading the Maternity Benefit Act by discharging women who are likely to qualify for the benefit.

Although Bengal is one of the most important provinces from the point of view of the number of workers employed in the match industry, the employers have not done much for the proper housing of their workers. Nor has the welfare side received sufficient attention. Compared to its other sister factories elsewhere in the country, the WIMCO at Calcutta also seems to have done but little for the welfare of its operatives.

CHAPTER III-BOMBAY.

The exact number of match factories located in the province of Bombay, excluding Indian States, is not known but it is estimated that the number would be approximately 4.

For purposes of the present enquiry, three of the factories in the suburbs of Bombay, including the one belonging to the Western India Match Co. at Ambernath, were surveyed. The WIMCO Match Factory is a highly mechanised one and all work from sawing of wood to banderoling is done through the agency of machines. In the other two factories covered, however, many of the processes are carried out by hand. There is a chlorate factory attached to the WIMCO Match Factory and this factory is also the source of supply of chlorate to the other two factories.

Employment.—The total number of workers employed in the three factories covered for purposes of this survey was about 1,500 in 1944, of which over a thousand were employed by the WIMCO Factory. The other two units are

comparatively small and employed 295 and 130 persons respectively.

Of the 1,497 persons employed, 1,214 were males, 263 females and 20 young persons. As compared to the pre-war year 1939, employment in these match factories appears to have gone down considerably. This fall is more pronounced in the case of the employment of women. Only in one of these factories are young persons employed. They are called half-timers and work in the packing and banderoling departments.

More than two-thirds of the workers in the WIMCO Factory are on piece rates, while in the case of the other two an equal number is on time and piece rates respectively. The smaller match factories draw no distinction between permanent and temporary workers, while in the WIMCO Match Factory nearly

90 per cent, of the workers are regarded as permanent.

Labour is recruited directly and no contract labour is employed by any of these concerns. Recruitment is made at the gates of the factories. Usually, relatives of workers are preferred. In the WIMCO Match Factory workers are taken on three months' probation. A small number of persons employed in the WIMCO factory belongs to the criminal tribes.

One of the factories has no Standing Orders but the WIMCO have a "set of rules of employment for factory workers." These, it is understood, are under revision. The other factory follows the Standing Orders adopted

for the cotton mill industry in Bombay City.

The WIMCO factory has a Labour Officer to attend to workers' grievances. The percentage of absenteeism varies very widely between these three factories. In the smaller concerns it amounts to about 20 to 25 per cent, while in the WIMCO Match Co. it is about 6.5 per cent only. The smaller percentage of absenteeism in the WIMCO Match Factory is undoubtedly due to the housing supplied by the company and the numerous welfare activities conducted by them. Nor is labour turnover very high in the WIMCO Match Factory.

Working Conditions.

The working conditions inside the Wimco Match Factory leave little to be desired. The departments are extremely well lighted and ventilated and every care is taken to see that the worker is not put to any undue strain. There is adequate spacing between the machines and enough room for movement. As compared to the WIMCO Factory working conditions inside the smaller factories are very inferior.

Hours of Work and Shifts.—Two of the smaller factories have an actual working day of 9 hours, the spreadover being 10. The starting time is 8 or 8.30 a.m. and work continues up til 6 or 6.30 p.m. The WIMCO Company follow a somewhat complicated system of hours and shifts. The

system is as follows :-

The general shifts hours in the factory are 8 a.m. to 6.30 p.m. with an hour's rest interval between 1 and 2 p.m. Saturday is a half-day and the hours of work are 8 a.m. to 2 p.m. Some departments work more than one shift. The peeling department has two shifts: 8 a.m. to 6.30 p.m. and 6.30 p.m. to 5 a.m., with an hour's rest interval. In the continuous machine department there is the following system of six overlapping shifts,

8 a.m. to 6-30 p.m. I Shift: Interval 1 p.m. to 2 p.m. II Shift: 8 a.m. to 9 p.m. 2 p.m. to 5-30 p.m. 95 III Shift: 2 p.m. to 12-30 a.m. 5-30 p.m. to 6-30 p.m, 99 IV Shift: 8 a.m. to 6-30 p.m. 12 Noon to 1 p.m. V Shift: 8 a.m. to 6-30 p.m. 2 p.m. to 3 p.m. 11-30 a.m. to 12-30 a.m. VI Shift; 3 p.m. to 6-30 p.m.

These hours are observed on week days. It will be noticed that in all cases the actual working hours of each shift are 9-1/2 only. On Saturdays, which are half-days, the working hours are:—

I Shift: 8 a.m. to 11 a.m. and 2 p.m. to 5 p.m.

II Shift: 8 a.m. to 2 p.m. III Shift: 12 noon to 6 p.m.

IV Shift: 8 a.m. to 12 noon and 1 p.m. to 3 p.m. V Shift: 8 a.m. to 1 p.m. and 2 p.m. to 3 p.m. VI Shift: 11 a.m. to 2 p.m. and 3 p.m. to 6 p.m.

Thus, on Saturdays, the actual working hours are 6 only.

Fitters also work in four shifts, the first shift starting at 10 a.m. the second and third at 8 a.m. and the fourth at 2 p.m. All of them have 9-1|2 actual working hours. On Saturdays, they are 6-hour shifts. In the box-making department the starting hour and closing hour for each section is different commencing from 6.30 a.m. and closing at 5 a.m. in each case the working hours being 9-1|2. On Saturday, each of them is a 6-hour shift. The Friction composition section in the packing department has one shift from 6.30 a.m. to 5 p.m. with an interval between 12.30 to 1.30 p.m.

Wages and Earnings.

A wage census was taken of all the workers in two of the factories surveyed. No census could be taken in the third as the manner in which the muster rolls had been maintained could not permit of such an enquiry being made.

There is a very marked diversity in the earnings of the workers in these two factories amounting to about 100 per cent. firstly due to the fact that one of them is highly mechanised, while the other is not and secondly because, while one factory pays dearness allowance on the scale followed by the Bombay Mill Owners' Association, the other pays at a very much lower rate. Strict comparison of the wages paid in the different occupations in these two factories is not possible because of the differences in the nature of the work involved, but the figures set out in the following tables for certain selected occupations may be of interest.

Table showing wages and earnings of workers in selected occupations in the Match Factory of the WIMCO at Ambernath (Bombay).

Occupation.			Piece or Time rate.	No. of workers.	No. of samples taken.	Sex.	Average daily basic wage.	Av ragg daily gross earnings including over-time allowance bonuses	daily net earnings inculding over-time, s, allowances,	period.	Average Basic Why). in the wage samples atter	Average net earnings period of with full dance.	Number working days in the wage period.
					Mings of the Control		Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Carpenters—Banderoling machine			T	13	13	M.	1 6 9	2 10 4	2 10 4	61 10 - 0	35 12 5	67 12 5	26
Attendants			P	31	29	M.	1 5 10	2 9	2 9 5	59 5 10	36 1 2	67 8 8	26
Peeling waste transporters		1941/	P.	28	28	M.	1 5 8	2 4 (2 4 0	53 11 6	28 6 8	47 10 9	26
Box closing Assistants	1		P	56	56	M	0 15 11	2 2 1	2 2 11	48 9 0	25 15 0	56 15 1	26
Machine Attendants		1.	Ρ.	266	264	M.	1 6 0	2 9 4	5 2 9 5	60 2 3	37 1 4	69 5 10	26
Helpers			P	85	85	M.	1 5 1	2 8 4	2 8 5	59 2 2	35 6 7	66 6 1	26
Veener peeling			P	42	42	M.	1 5 8	2 9	2 9 1	50 6 1	38 6 8	70 1 9	26
Box Filling Helpers			P	15	15	F.	1 4 11	2 8 5	2 2 8 2	58 0 9	34 12 0	66 4 0	26
Box dressers			P	14	14	M.	1 5 6	2 8 8	2 8 8	59 0	32 12 0	63 14 1	26
Banderoling			P	31	31	M.	1 2 3	2 5	3 2 5 6	51 7 7	29 10 7	64 2 0	26
Dryer Attendants		١	P	28	28	M.	1 2 9	2 3 :	2 6 3	51 10 6	30 5 3	62 12 11	26
Coo'ies			Т	281	57	M.	0 13 1	2 0	2 0 0	100	- 1.	4.58	26
The state of the s			Total	890	662		Ship of the state						

M. = Males

12

Table showing wages and earnings in principal occupations in the Bombay Match Works at Kurla (Bombay).

Occupations.	Shift.	Sex	Piece or Time rate.	No. of hours of work per shirt.	No. of workers.	No. of samples taken.	Average daily basic wages earned.	Average daily gross earnings including overtime allcwances and bonuses.	overtime	Actual average net earnings in the wage period.	Average basic wages earned in the wage period by samples with full attendance.	Average net earnings in the wage period of samples with full attendance.	No. of working days in the wage period
		E E E	61 Y		18 8		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	BBB
Drivers	I	Males	T	9	13	13	0 14 6	1 1 7	1 1 7	24 13 1	26 0 8	29 15 2	25
Sawyers	I	**	T	9	5	5	0 14 0	1 0 1	1 0 1	21 6 10	21 14 0	25 2 6	25
Machine helper	I	"	T	9	9	9	0 12 5	0 14 4	0 14 4	13 2 4			25
Carpenters	I	Females	T	9	23 5	23 5	$\begin{array}{cccc}0&9&0\\2&2&6\end{array}$	0 10 4 2 5 10	0 10 4 2 5 10	13 10 0 54 6 10	14 1 0	16 2 9	25
Packers	I	99	T	9	3	3	0 13 3	0 15 11	0 15 11	22 3 10	I SO		25
新しまか月15日2	1	Females	T	9	7	7	0 8 2	0 11 5	0 11 5	15 9 3	3 + 5	7.56	25
Machine attendants		Males	T	9	35	35	0 14 5	1 0 8	1 0 8	21 12 5	23 7 2	26 15 6	25
	818	Females	T	9	5	5	0 11 5	0 15 2	0 15 2	16 10 9		FE-51	25
Box Fillers	2 3	,,	P		60	60	0 7 7	0 11 6	0 11 6	13 10 4	1 1 7	16 0 8	25
Affixers		Males	P	48.0	15	15	0 9 11	0 12 7	0 12 7	7 9 4	10 13 0	15 2 3	25
STA ENER	1 4 9	Females	T	9	14	14	0 5 0	0 7 0	0 7 0	6 15 10			
Arrangers (Veneer)		,,	T	9	25	25	0 6 3	0 8 8	0 8 8	10 12 1	11 8 4	16 2 0	25
Coolies		Males	Т	9	23	23	0 14 0	1 0 7	1 0 7	20 9 10	21 14 0	25 12 6	25
A THE STATE OF THE	outpr ref. St.	Table:	The state of	Total	242	242			STATE OF THE PARTY				

[uncol

An examination of the frequency* of wages and earnings in these two factories reveals that nearly 80 per cent. earn a wage of between annas twelve and Rs. 1-8-0, while a similar percentage are in receipt of a daily net carning of Rs. 1-12-0 and over Rs. 2-8-0. Actually slightly over 27 per cent. of the workers were earning Rs. 2-8-0 or more per day. The average attendance in the better paying of the two factories was 23.1 out of 26 working days, while in the other, it was 20 out of 25 working days.

The wage rates in the WIMCO factory are fixed as per an award made by

the Commissioner of Labour in the year 1935. In neither of these factories

is there any regular scale of promotion.

Dearness allowance.—The scale of dearness allowance is different in all The Wimco factory follows the scale adopted by the Mill the three factories. Owners' Association, Bombay, according to which the allowance paid came to about Rs. 1-2-3 per day in March 1944. In one factory the dearness allowance varies from occupation to occupation from 12-1 2 per cent. of the monthly earnings to 25 per cent. of the monthly earnings. In the third factory those getting up to Rs. 1-8-0 per day are paid 50 per cent. of their monthly earnings as dearness allowance, while those getting above Rs. 1-8-0 per day are given an allowance at the rate of 22-1 |2 per cent. Piece-rate workers in this factory are paid 75 per cent. of their monthly earnings.

Bonuses.—In the Wimco Match Factory a production bonus is paid according to the following system: Whenever the total production of the factory passes a certain minimum the company gives a bonus to all the workers at a flat percentage on the total earnings (excluding over-time and dearness allowance) in a particular month. The payment of this bonus was started in May 1944. The amount received by the workers, was the highest in June 1944 being 21.3 per cent, of their earnings. During the months of November and December, no bonus was earned, but in February 1945, it was 15 per cent.

of the workers' earnings.

The smaller units pay no war bonus while Wimco have been paying for the last three years a war bonus at the rate of one-sixth of the annual earnings of their operatives.

Fining.—Fining in all the three factories is extremely nominal.

In the Wimco Match Factory some workers are paid fortnightly and others monthly. The wage period in the other small unit is the English calendar month. Wages are usually paid within seven days of their becoming due.

Housing.

The smaller units provide no housing for their labour. The WIMCO company houses nearly 50 per cent. of its workers in colonies specially constructed for them. They have provided 452 tenements at a cost of above Rs. 3 They are mostly pucca structures either built of brick or of corrugated iron sheets. The houses are properly tiled and have cement flooring. They are all double-roomed. The rent varies from Rs. 2-6-0 to Rs. 4-6-0 per month. The quarters are well lighted and ventilated.

Welfare work.

The two smaller units are doing nothing by way of welfare except keeping first-aid boxes. The Wimco Company have, however, done considerable They have a dispensary in the precincts of the facwork in this direction. tory which is kept open all the 24 hours. It is in charge of a qualified doctor assisted by compounders, etc. There is a creche for the benefit of the women workers with a proper staff. A Primary School has been started in workers' colony and special arrangements are also made for the schooling of South Indian children. Free tea is served twice a day to the workers in their

^{*} Appendix VI (a) and (b).

departments. This alone costs the management about Rs. 1,800 a month. The Company runs a grain shop where commodities are sold at concession rates. The loss to the company on account of the shop is over Rs. 2,000 per annum.

The factory has a system of Provident Fund for employees getting a salary of Rs. 50 and over. It is optional in the case of those getting less than Rs. 50 per month. The workers contribute 8-1|3 per cent. of their pay, while an equal amount is contributed by the company. The company's contribution is payable after 15 years' service. The membership on the date of enquiry was 165. There is also a system of paying a Service Gratuity.

The labour in the match industry in Bombay is completely unorganised. At one time there used to be at Ambernath a powerful Union of workers employed in the Wimco Match Factory and this had been recognised by the employers. The Union is now almost defunct.

CHAPTER IV.—MADRAS.

Employment.

Bun 1401 was sant 30

As will be seen from Appendix I, there were about 67 match factories in Madras Province employing about 3349 persons in the year 1943. The number of factories intensively surveyed in Madras Province was 3 although a number of them in Ramnad District were personally inspected. One of these was located in Madras, and 2 in the Ramnad District of Madras Province.

The largest among these factories is the Western India Match Company's lactory at Tiruvattiyur, about 18 miles from Madras, which employs about 800 workers. The workers are classed as permanent and temporary, the former accounting for about 75 per cent. and the latter for the remainder. About 150 casual workers are employed outside the factory on the basis of daily wages. It would appear from the figures supplied by the management that the turnover of labour is comparatively small and that nearly 70.7 per cent. of the workers have put in more than five years' service. The facof the workers have put in more than five years' service. tory has no Standing Orders at present but these, it is understood, will put into operation shortly. The workers are recruited through the Labour Officers subject to the management's approval. The workers are medically examined before admission. The factory maintains service cards for all the workers containing full particulars about the operative such as, his wages, leave granted, absence wihout permission, penalties inflicted, etc. From certain figures supplied by the Company for the months of June and July 1944, it would appear that absenteeism is comparatively little, being of the order of about 7.5 per cent. This figure, however, does not include those absent on leave. Absenteeism is generally greater on days following rest days, pay and festival days, etc. The workers get 10 days' casual leave with pay in a year.

Working Conditions.—This is a highly mechanised plant where the bulk of the work is done by the machine and the workmen are not required to undergo much toil. The factory is airy, commodious and well ventilated.

This factory provides latrines and urinals separately for males and females and the number provided is actually in excess of the scale laid down by the Factory Act. Adequate arrangements are made for supplying drinking water and water carriers are employed to distribute water to workers. The water is boiled before its distribution. Tiffin sheds are also provided for Hindu and Muslim workers.

Hours of work and Shifts.—This factory works only a day shift. The working hours are from 8 a.m. to 1 p.m. and 2 p.m. to 6 p.m. Sunday is observed as a holiday. The normal hours of work per week until recently were $53\frac{1}{2}$ but now a 57-hour week is being worked. The difference of $3\frac{1}{2}$ hours is worked on Saturdays. The additional hours are recorded as overtime. The spread-over is $10\frac{1}{2}$ hours per day.

Wages and Earnings.—The statements in Appendix II show the present piece and minimum time rates of workers employed in this factory in December 1943. It is stated that in January 1943 the piece rates were increased to the extent of ½ anna per rupee and that adjustments were also made in certain piece rates of a few occupations in favour of the workers. Wages in this concern are fixed on the basis of the prevailing wage rates in neighbouring localities, the workers' cost of living, and the degree of skill and physical effort required for a particular job.

A wage census was taken in this factory on a sample basis for the month of January 1944 and the following table summarises the results for selected occupations.

and water carriers are employed to distribute valor to wedge. Incomedia

(Table, page 17).

Table VIII.

Table showing wages and earnings in selected occupations in the WIMCO factory at Tiruvattiyur, Madras.

Occupation. Sh	uift.	Sex.	Piece or Time rate.	No. of hours of work per shift.	No. of workers	Averdai Ba W earr	ly sics age		da oss e in incl ov tin	ngs ludi ver- me wan	ng	incl	ear ear ludi ver- time van	ing e	av net in the	etua erag ear e wa erio	ge n- in age	wag	ges ed in way od b nple n ful end-	n ge oy es	net ing the per	s in wa riod nple n fu end-	ge of es	Number of working days in the wage period.
						Rs.		p.		. a.				р.		. a.		Rs.	а.	p.	Rs.	a.	p.	五世 音
	en.	Males	P	91/2	15	1		0	2			2		11	46	1	3							25
Sawyers	,	,,	25	"	6	1	9	7	1	15	8	1	15	8	46	8	2	39	15	3	49	14	9	99
Peeling Machine opera-																								
	"	,,	,,,	"	10	1	9	6	1	14		1	14			14	2	43	9	9	53		0	, ,,
Coolies-Box-making	,,	,,	33	33	17	1	5	9	1	9	6	1	9	6	34	6	9	34	10	3	43	14	0	"
	,,	,,	81	"	1	1	5	7	1	11	5	1	11	5	41	2	3							,,
Choppers	,,	23	37	"	3	1	5	3	1	9	5	1	9	5	35	3	6							23
	,,	,,	,,	"	2	1		1	1	8	11	1		11	35	3	9							23
Machine men	,,	"	,,	,,	76	1	4	6	1	8	7	1	8	7	24	10	10	36	2	3	45		3	23
Drivers— (Box-closing) (Box-making)	,,	,,,	,,		106	1	3	9	1	5	3	1	5	3	33	5	0	33	6	9			0	p
Bandrolers	"	99	,,,	33	18	1	1	7	1	5	6	1	5	6	31		6				34	4		,,,
Peeling Tuble Boys	23	33	,,,	"	51	1	1	0	1	3	8	1	3	8		13	6	26	4	9	29	7	9	99
Box-labelling Helpers Box-filling workers—	,,	"	"	,,	26	1	0	9	1	5	3	1	5	3	28	8	9		••			••		3)
Feeders, Helpers & Arrangers.	,,	,,	"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	86	1	0	6	1	3	4	1	3	4	24	11	8	16	6	2	20	14	10*	99
General Coolies	ii	n	,,	11	65	0	13	6	1	0	11	- 1	0	11	23	7	7	20	10	0	26	5	0	"
		Total		:	482																			

^{*} The average monthly earning relates to those who have attended all the working days in the wage period. As they are piece workers, the actual average net earning is more, due to individual efficiency.

It will be seen that the average daily basic wages vary from 13 as. 6 ps. to Rs. 1-11-0 and the average daily net earnings from Rs. 1-0-11 to Rs. 2-3-11. As will be seen from a subsequent paragraph, the difference between daily basic wages and net earnings is not very wide because of the system followed by the factory of giving commodities to its workers at pre-war rates.

In addition to the basic wages the Company pays the following allowances and bonuses:—

- (a) Dearness allowance,
- (b) Attendance bonus,
- (c) Annual war bonus,
- (d) Supply of stores at pre-war prices, (e) Supply of fuel at Rs. 8-2-0 per ton.
- (a) Dearness Allowance.—Unlike most factories in the country, this factory supplies to its workers nearly fifty commodities of daily consumption at pre-war prices. A list of these commodities will be found in Appendix III. It is estimated that the cost of this concession to the employer is about Rs. 25 per month per worker. The management, therefore, pay only a nominal cash dearness allowance of As. 0-1-4 per rupee of earnings to those earning up to Rs. 75 per month.
- (b) Attendance bonus.—This bonus is paid at the rate of 10 per cent. of the earnings to those who do not absent themselves for more than one day in a month and at the rate of 5 per cent to those who absent themselves for not more than two days in the month.
- (3) War bonus.—The payment of this bonus is dependent on the profits made by the Company. This is not a regular annual payment but the Company has recently paid a war bonus equivalent to 3 months' wages inlcusive of dearness allowance to all workers earning Rs. 50|- and below, and equivalent to 3 months' wages to others.

In regard to overtime, this factory pays double the wages for overtime work in excess of normal working hours. In the case of piece workers the average wages are deemed to be ordinary wages for calculating overtime.

Wages are paid directly to the labour and the period of wage payment is a month. Wages are paid six days after they become due.

Housing.

About 11 per cent. of the total workers are provided with housing accommodation. The houses are provided with electric lights, adequate water supply, and underground drainage. Two bath rooms with shower arrangements each having six cubicals have also been provided. Each tenement consists of one bed-room, a kitchen, a closed backyard and a front verandah. On an average there are four persons in the family and the rent charged is Rs. 2-8-0 per month. The quarters are situated about a furlong from the factory and amenities such as, a market, a post office, etc. are available in the vicinity. The quarters are provided only to essential workers likely to be required for duty. As regards the other employees of the Company, they live either in the town proper or come from adjacent villages. It is stated that the workers of this factory prefer to live in their own villages.

Subletting is not permitted and each tenant has to sign a copy of an agreement (Appendix IV) which contains the terms of tenancy. It is stated by the management that 15 days' notice on either side should be given for the termination of the tenancy. The agreement, however, contains the following clause:—

"The Company shall be at liberty to revoke this license at any time without notice and without giving or being liable to give any reason thereafter to the

licensee and thereupon the licensee will forthwith hand over to the Company vacant possession of the rooms."

Welfares Activities.

It is stated that as the workers bring their own food there is no necessity for establishing a canteen. No creches have been established, as no female labour is employed. The factory provides free medical attendance to workers and dependants living in the Company's quarters and also to such of the workers as call at their dispensary. Arrangements are made for certain outdoor games but the most important welfare activity of this concern is to provide stores at pre-war cost. The Company runs a free school for workers' children and it is estimated that the percentage of literacy among the owners of this factory is about 52.

General.—This factory has a well-paid Labour Officer. The relations between the management and the workers appear to be cordial and the workers' Union, which has a membership of about 800, has been recognised by the management.

(B) Ramnad District (Madras Presidency).

Ramnad district in Madras is a large match manufacturing centre with a number of match factories. According to the Report on the Administration of the Factories Act for the year 1941, there were in this district 33 factories employing about 1,785 persons. A large majority of these are small units employing from 20 to about 100 persons, although there are one or two employing 100 or more persons. These factories contain very little machinery and much of the work is done by hand. Moreover, many of the smaller units allow the workers, and some-times cutsiders, to take work home and are paid on piece-work basis. As stated already, Sattur and Shivakasi which are the two main centres of the industry in this district are virtual match towns where the bulk of the population seems dependent on the industry and in almost every home can be seen men, women and children engaged on some process of match manufacture such as, box-making, box-labelling, etc.

It was impossible to make an intensive survey into the working conditions in all these factories but a good few both at Sattur and Shivakasi were personally inspected. A most remarkable sight was that on arrival it was found that young persons of about the age of 8 or 10, particularly girls, ran helter-skelter with trays on their heads. It was explained to me by the Factory Inspector that this was an usual sight when he visited these factories. The meaning of it all was that these youngsters were all uncertified children working in the factories who were trained to pretend, on the appearance of the factory Inspector or any other visitor, that they were only carrying the trays etc. to their homes for the work to be done by their elders in their homes. In these factories were also found working many children who were obviously under 12 years of age although they seemed to be in possession of badges showing that they were certified.

Most of these factories are housed in fairly large sheds and the workers do their work squatting on the floor. There is enough moving space and generally speaking the sheds are well lighted and ventilated. The working conditions are fairly satisfactory except in the Dipping department where the atmosphere is hot and unpleasant.

There are no special arrangements for water supply etc. although there is a common tap for drinking water. Sanitary arrangements are usually poor. Generally there are no rest sheds as the workers go to their houses for their afternoon meals.

Hours of work and shifts.—Usually one shift per day is worked and the hours of work are from 8 a.m. to 1 p.m. and 2 p.m. to 6 p.m. with an

hear's interval. There are, however, complaints that many of the workers in these factories are made to work for about ten hours a day without being paid any over-time allowance. Sunday is generally observed as a closed day.

Wages and Earnings.—Two of the bigger units from among these factories employing about 532 persons were selected for purposes of a wage census. One of these factories reported that it employed an additional labour force of 460 workers who worked in their own homes. The census related to the weekly wage periods ending 20th and 23rd in the month of January 1944 and covered only those employed in the factory itself. These factories, however, had a different wage period for time and piece workers. In both factories dearness allowance was being paid only to time-rated workers at a rate of Rs. 4|- and Rs. 5|- per mensem respectively.

The following tables give the frequency of wages and earnings in these

Table IX (a).

Table showing the frequency of daily basic wages.

Wage groups.			No. of vorkers.	Per- centage to total.	
Under annas four'l			159	29.88	
Annas 4 and below As, 6		 	200	37.59	
Annas 67 and below As. 8		 	157	29.51	
Annas 8 and below As, 10		 	12	2.28	
Annas 10 and below As. 12			2	0.38	
Annas 12 and below As, 14	S side	 £01.00	1	0.19	
Annas 14 and below Re. 1		 	1	0.19	
Over Re. 1	11/199	 	nil		
	Total	 	532	100	

Table IX (b).

Table showing the frequency of Net Earnings.

Income groups.					No. of workers.	Per- centage to total.	
Under annas four			 		130	24.44	*
Annas 4 and below	As.	6	 4		185	34.77	
Annas 6 and below	As.	8	 ed 95. 7		152	28.57	
Annas 8 and below	As. 1	0	 		15	2.82	
Annas 10 and below	As. 1	2	 		32	6.01	
Annas 12 and below	As. 1	14	 and strong		10	1.88	
	Re.	1	 		6	1.13	VIII 2 - 1
	Rs. 1	12	 				
	Rs. 1/		 				
	Rs. 1			700.	1	0.19	
	Rs. 1		 MI 1		1 1	0.19	
Over Rs. 1/8			 ***		nil		
		7	Total		532	100	

So far as the basic wages are concerned, it will be seen that over 96 per cent. fall under the wage group below annas 8, while the earnings of about 58 per cent. also fall within that group. No woman or child appears to earn more than annas 8 per day.

The unskilled labour in these factories consists mostly of women and children. They are usually engaged in frame-filling, box-making, box-filling,

Table Showing basic wages and earnings in principal occupations in the National Match Works at Shivakasi, Ramnad

Distt. (Madras).

Occupations.	Si would did the of the	Shift.	Sex.	Piece or Time rate.	No. of hours of work per shif		No. of samples taken.	da Ba Wa	erag ily sic ages ned.	Ð	de great include over all and	erage aily ross mings luding rtime low- ces & nuses.	; i	Average daily net earn- ings including overtime, allow- ances & bonuses.	Actual average earnings in the wage period.	Average basic Wager earned the war period sample with fu attendance.	in ge by s	Average net earn- ings in the wage period of samples with full attend- ance.	No. of working days in the wage period.	
D ippers		I, II, III.	Males	т	9	3	3	Rs 0		р. 1	Rs 0	. a. p 13 l		Rs. a. p. 0 13 1	Rs. a. p. 6 8 11	Rs. a. 5 8	p. 11	Rs. a. p. 6 8 11	8	
Packers Paraffin dippers Box-filling		Gen. I, II,	27 21 21	"	"	16 2 4	16 2 4	2 0	7	0 5 8		10 1 10 8 1	7	0 10 11 0 10 7 0 8 10	4 13 8 5 9 10 4 6 8	3 5	4 0 4	5 3 8 5 10 8 4 6 8		
Banderolers		III.	Fem. Chd. Fem. Chd.	P. "	5 9 5	76 102 52 20	24 20 61 10	0 0	6 5	3 7 1 6	0 0 0	5 6 5	3 7 1 6	0 6 3 0 5 7 0 6 1 0 5 6	1 13 9 1 14 6 1 15 4 1 12 9	2 5 2 2	6 4 8 7	2 9 6 2 0 4 2 5 8 2 2 7	6 6	
Dipping Boys Total		Day	Males	Т	9	292	157		4	3	0	5 1	0	0 5 10	2 13 5	2 3	7	3 0 11	8	

bandercling and labelling. The semi-skilled and skilled staff consists mostly of males who are monthly-rated. Their salaries vary from Rs. 15 to Rs. 30 although at Shivakasi some foremen are paid about Rs. 60|- p.m.

The figures given in Table X, relating to one of the factories at Shivakasi illustrates the position regarding wages and earnings of workers engaged in

certain numerically important occupations.

Housing.—As the workers reside close to the factories in their own homes, the employers provide no housing. It is noticeable, however, that the workers' bomes are extremely clean and well lighted and although both Sattur and Shivakasi are mainly industrial towns now, no slums have arisen as a result of the growth of factories there.

Welfare Work.—None of these factories is doing any work by way of welfare. There is no provision made for the worker's future, nor is there much security of tenure so far as day-to-day employment is concerned.

The owners of these factories are not well organised and it is understood that there is fierce competition amongst them leading to constant pricecutting. It is obvious that the wages paid are extremely poor and that nothing at all is being done to look after the welfare of the operatives.

Although the Maternity Benefit Act applies to these factories few cases of the payment of maternity benefit appear to be in evidence. It is doubtful also whether the provisions of the Factories Act are being strictly followed by these factories in regard to hours of work, age of employment, etc.

CHAPTER V.—ASSAM.

At Dhubri in the Goalpara district of Assam, there is a match factory belonging to the Assam Match Company, a sister company of WIMCO. It was established about the year 1925.

Employment.

As compared to the pre-war period, employment in this factory has nearly trebled; while in August 1939, the number of persons employed was 355 only, it rose to 889 on 1st January 1944, the figure for February 1945 Slightly over half the number employed is on a piece-rate basis. The factory employs only male workers. There is no contract labour and all the workers are paid directly by the company itself. The workers are all designated as permanent. No service records are kept but it is understood that the labour in this factory is, on the whole, stable. Absenteeism amounts to about 10 to 12 per cent. As the workers hardly ever put in an application for leave stating the cause for which it is required it is difficult to analyse the causes of absenteeism but enquiries made on the spot suggest that absenteeism is greater during the harvesting season when the workers like to retire to their villages for agricultural operations. Absenteeism is also more in evidence on the day following the pay day.

Labour is recruited at the factory gates. Although technically all the appointments are made by the Manager, actually they are made on the recommendation of the mistry. There is no Labour Officer or any other separate agency for recruiting the workers.

Working conditions.

This factory is highly mechanised. It is lit with electricity. Working conditions inside are fairly satisfactory, although some of the departments are very warm inside as the entire structure of the factory is made of corrugated iron sheets. Exhaust fans have been installed in one department, namely, the sawing department for sucking the dust.

Note.—I am indebted to Mr. S. P. Saksena, statistician, Office of the Director, Cost of Living Index Scheme, for collecting the spot information relating to this factory.

Hours of work and shifts—This factory works two shifts of 9 hours each. The first shift commences at 7 a.m. and ends at 5.30 p.m. with an interval of 1-1/2 hours. The second shift begins at 6.30 p.m. and ends at 4.30 a.m. with an hour's interval. It is stated that as the workers live close to the factory no rest shelters have been provided.

Wages and Earning.—It was not found possible to conduct a wage census in this factory and the information relating to wages and earnings is based on such ad hoc investigations as could be carried on the spot supplemented by the information supplied by the management.

Appendix V contains information regarding the earnings of the workers excluding allowances in February 1939 and February 1945. It is reported that the basic rates, both piece and time, have not been radically changed since the War although, as a result of larger production, the piece workers particularly are able to earn more. The daily rate of wages of unskilled workers such as coolies, sweepers, etc. is As. 11 or Rs. 17-14-0 for a month of 26 working days. The following summary statement gives the fortnightly maximum and minimum earnings (excluding allowances) in February 1945, in selected occupations:

TABLE XI.

Department.		A KOD	M	Iax	imu	m	Mini	mu	m.		-
omates and their terms		indi To	Te i	Rs.	а.	p.	Rs.	a.	p.		
Frame Filling Inner Box-		200.976		22	6	0	17	5	0		
making				21	7	0	16	4	0		
Outer Box-making Box closing						0	14		0	-	
Helpers				14	6	0	11	8	0		
Drivers Box filling	••	• • • • • • • • • • • • • • • • • • • •		16	1	0	13	4	0		
Helpers				13	0	0	10	2	U		
Drivers				19	14	0	15	12	0		
Banderolers				13.	4	0	12	2	0		

Workers employed in the Dipping and Paraffining department seem to earn the highest wages, the maximum and the minimum being Rs. 42 and Rs. 37-2-0 per fortnight respectively.

In addition to the basic wages this factory pays a number of allowances and bonuses. These are (a) Dearness allowance, (b) a production bonus, (c) attendance bonus, (d) grain allowance and (e) profit bonus. All these are of a temporary character and are shown separately in the muster rolls.

Dearness allowance is paid at the rate of 2 annas per rupee of the basic wage. The production bonus is paid at the rate of annas 4½ on a production of over 80 boxes per day. The earning from this bonus is naturally dependent on the worker's production but generally it comes to about annas four to annas five per rupee of basic wages. Attendance bonus is paid at the rate of annas two per day of attendance and no minimum attendance has been laid down to qualify for this bonus. In addition another allowance allied to attendance called the grainstore allowance is paid at the rate of annas six per day. For purposes of the payment of this allowance absence up to 1½ days in a fortnight is condoned. If absence exceeds 1½ days in a

fortnight then the allowance is paid pro-rata for days of attendance. Otherwise, the allowance is paid for the whole of the fortnight including Sundays. Thus a box-filling helper getting Rs. 13 per fortnight will get in addition, if he puts in full-time attendance, about Rs. 12-9-0 by way of allowances or will receive a monthly wage of about Rs. 51-2-0.

The Company also pays a profit bonus. This amounted to 1½ months' wages in 1941, and to two months' wages in subsequent years.

The wage period is a fortnight and wages are paid generally on the seventh day after they become due. No fines are imposed and no fine fund is therefore maintained.

Housing.—The Company has provided accommodation for only 18 workers. Half of these quarters are single-roomed and the other half doubled-roomed. The single-room quarters are again of two types, the only difference being in the size of the rooms. The single quarters have one room only, measuring 10 ft. × 6 ft. or 8 ft. × 6 ft. The double-room quarters have two rooms measuring 10 ft. × 8 ft. and 10 ft. × 6 ft. The rent of single-room quarters is Rs. 2-8-0 and that of the double-room quarters is Rs. 3-8-0 per month. The quarters are made of bamboo laths plastered with mud. The roofs are of corrugated iron sheets. These quarters are mostly occupied by up-country labour from the United Provinces. The local labour resides in the town in houses owned by themselves or by private landlords. There is only one well for the provision of water to the inmates of these quarters. Only one common latrine has also been supplied with five seats for the residents of this colony numbering about 150. There are no separate latrines for women and the sanitation is extremely poor.

Those who do not reside in the company's quarters usually live in the bamboo huts plastered with mud. The ground rent of such dwellings is annas eight per month. Where similar accommodation is obtained from private land-lords, the rate to be paid varies from Rs. 1-8-0 to Rs. 2-0-0 per month. Those coming from adjoining villages go back to their village homes from the factory every day.

Welfare work.—The company maintains a small dispensary in the factory premises. It is in charge of a doctor and there are two compounders to assist him. The dispensary appeared to be not particularly well-equipped.

In addition to a grain-store allowance paid, the company supplies grains and provisions to workers in limited quantities at government-controlled rates.

It is understood that with effect from the 1st April 1945, the company has introduced a Provident Fund scheme for its operatives. The membership of the fund will be open to all workers who have put in one year's service. Every member will contribute at the rate of Rs. 0-1-4 per rupee of his basic fortnightly wages. The company will contribute an equal amount. Fifteen years' completed service will entitle a worker to receive the full company's contribution. In the event of death, however, the worker will get the full contribution of the company even with less than 15 years' service. If a worker has completed only 10 years' service but less than 15 years, a proportionate amount varying from 50 to 90 per cent. of the company's contribution would be payable.

Apart from the recent institution of a Provident Fund Scheme, this company appears to be doing extremely little by way of welfare work for its operatives.

The workers have no Trade Unions of their own.

CHAPTER VI.-UNITED PROVINCE.

There were in U.P. in the year 1943, two match factories employing 1,013 persons. During the present enquiry only the factory at Bareilly, which is the largest, has been covered.

Employment.—At Bareilly there is a match factory belonging to the Western India Match Co. which employed, at the time of the enquiry, 1,078 persons. Slightly more than half were on piece rates. No women were employed although, it was reported, that the Company had in its employment 14 children. The labour is employed direct. As compared to the pre-war period the number employed has gone up by about 150, but not appreciably. Owing, presumably, to the good conditions of service in this factory, the percentage of those who have served the factory for more than five years is quite large as the following figures will show:

1	Length	of Service.	No. of workers.	Percentage to
Those	between	0 & 1 year of service.	110	10.2
,,	,,	1 & 5 years of service.	450	41.8
"	"	5 & 10 years of service.	356	33.0
72	over	10 years of service.	162	15.0

The labour turnover for 1942 in this factory as compared to 1943, nowever, has gone up considerably and was reported to be 17.5 per cent. The reason for this appears to be the more attractive wages paid in some of the jobs connected with the War. Normally absenteeism is about 15 per cent. Since the War the percentage of absenteeism has not shown any wide variations. The company has a Labour Officer and the labour is recruited direct. The relations between the employers and the employees are regulated by Standing Orders framed by the Employers' Association of Northern India, Cawnpore.

Working Conditions.—The factory is situated in the open and is well ventilated and lighted. The hours of work during the main shift are 8 a.m. to 1 p.m. and 2 p.m. to 6 p.m. There is adequate water supply for drinking purposes and also satisfactory sanitary arrangements.

Wags and Earnings.—As compared to the pre-war period, on the whole, there has been an increase of about 8 per cent. in the basic wages of the operatives in this factory. There are no graded or time-scale promotions.

A wage census was conducted in the principal occupations in this factory for the first fortnight of March 1944 and the following frequency table* gives the results of the census.

TABLE XII.

Frequency Table Showing Wages and Earnings in the Match Factory Covered in the United Provinces.

Wage group.	,	No. of Workers.	Per centage.	Earning group.	No. of Workers.	Per- centage.
Less than 4 as						
4 as. but less than 6 as.						
6 as8 as		2	0.8	Under 8 as	310 DH	STORE
8 as 10 as	Take !	66	14.1	8 as. but less than 12 as.		
10 as12 as		43	9.2	12 asRe. 1	. 2	0.8
12 as14 as		51	11.1	Re. 1 Re. 1/4	. 59	12.3
14 as Re. 1		200	42.6	Rs. 1/4Rs. 1/8	. 89	19.2
Re. 1Rs. 1/2		32	6.7	Rs. 1/8Rs. 1/12	. 226	48.2
Rs. 1/2Rs.1/4		- 69	14.5	Rs. 1/12Rs. 2	. 87	18.5
Rs. 1/4 Rs. 1/8		4	0.8	Rs. 2Rs. 2/4	. 4	0.8
Rs. 1/8Rs. 1/12		1	0.2	Rs. 2/4Rs. 2/8	. 1	0.2
		468	100.0		468	100,0

It will be seen that nearly 42.6 per cent. of the workers are in receipt of a daily basic wage of as. 14 to Re. 1 and that over 48 per cent, have a daily net earning of between Rs. 1-8-0 to Rs.1-12-0. The average attendance per fortnight of 12 working days comes to 11.7 days.

The operatives in this factory get a dearness allowance varying according to income classes on the following scale:—

	Wages per mon]	Dearness Allowance.			
On earnings	upto Rs. 19	: noives	10.	R. 1. 6	S. (P	Rs. A. P. 0 5 0 a rupoe.
,,	from Rs. 19 to Rs. 50	. ACTVEYE	-	1.0		0 4 0 ,,
,,	from Rs. 51 to Rs. 80	-97FT.				0 3 6 ,,
19.81	from Rs. 81 to Rs. 150	To the last	£			0 3 0 ,,

In addition to the above allowance, the workers are paid what is known as the index allowance, according to which, if the Cawnpore cost of living index rises above 200 then one pie per point rise for each working day is paid to all workers. The index for the census month March 1944 was 278 and the workers thus got an additional allowance of 6 as. 6 ps. per day.

The company also pays an annual bonus equal to 1|6th of the total basic wages on condition that the worker should have put in at least 75 days during the year to qualify for the bonus and be on its rolls on the date of the payment of the bonus.

The wage period for process workers is a fortnight and payment is made within ten days after the end of the wage period. No fines are imposed by this concern and therefore they have not instituted a Fine Fund. The factory is closed on Sundays, except when a festival falls within the week, and no other holidays are given to the workers. There is no system of granting leave with pay to process workers, although monthly-rated workers get 15 days' leave with pay.

Housing.—Fifteen per cent of the workers are housed by the Company in 90 quarters, half of which are two-roomed and the rest one-roomed with a verandah, kitchen, water tap, latrine and an enclosed courtyard. The rent of the former is Rs. 4|- per month and of the latter Rs. 2|- per month. The quarters are well ventilated and properly drained. The workers who are not housed by the employers have to live in the city where they pay rents varying from Rs. 2|- to Rs. 6|- per month for a single-room tenement which is more often than not in a deplorable condition.

Welfare Work.—The factory maintains a dispensary in charge of a part-time doctor. It serves tea once a day, free of charge, to its workers at their places of work. It has subsidised a Primary School and also runs a grain shop where rationed articles are sold at a concession of 15 per cent. up to the quota laid down by the rationing authorities.

There is no provident fund for the workers, nor is there any scheme

regarding pension or gratuity.

The employees of this factory have organised themselves into a Co-operative Society which grants loans to workers at 3 per cent. interest up to four times their monthly pay.

General Observations.—The general conditions of work in this factory appear to be satisfactory and the labour force contented. The housing provided by the employers shows an appreciation of the needs of the workers and their families and it is to be hoped that the company will find it possible after the War to extend this beneficent activity to the rest of its operatives.

CHAPTER VII.—THE PUNJAB.

Employment.—There are only three match factories in the Punjab all of which are in Lahore. They employ 385 persons in all. All the three were covered for purposes of the present survey. Two of these are very small units, while the third one which belongs to the Western India Match Co. employes over 300 workers.

Unskilled labour is mostly recruited locally from Lahore and its surrounding villages. The skilled labour, however, is brought from outside, generally from Bilaspur in C. P. and Bareilly. The turn-over of labour is not very large, being about 8 to 9 per cent. In the largest match factory in Lahore absenteeism was reported to be only 4.1 per cent, while in the remaining two it was between 12 and 15 per cent.

Hours of work and shifts.—One of these concerns works two shifts, while the other two work only one shift of 9 hours each. Working hours are from 8 a.m. to 12.30 p.m. and 1.30 p.m. to 6 p.m., while the second shift is from 12.30 a.m. to 4.30 p.m. and 5.30 p.m. to 10.30 p.m.

Wages and Earnings.—A wage census was taken in all these factories for the month of April 1944 and the following table gives the frequency of wages and earnings.

in the Punjab.

TABLE XIII.

Frequency Table showing wages and earnings in the Match factories covered

	Daily Basic Wages					Daily net Earnings.					
Wage group.			No. of orkers.	Percentage.	Earning group.			No. of workers	Percentage.		
Less than 4	as.			7	1.7	Under 8	as.		10	2.7	
4 as. but less	than	6 as		1	0.2	8 as. but	less th	nan 12 as.	20	5.0	
6 as.	,,	8 as		19	5.0	12 as.	,,	Re. one	16	4.0	
0 00	,,	10		165	42.0	Re. 1	,,	Rs. 1/4	95	27.3	
10 ac	,,	12		79	23.0	Rs. 1/4	,,	Rs. 1/8	63	16.0	
12 as.	,,	14		56	14.5	Rs. 1/8	,,	Rs. 1/12	85	20.3	
14 as.	••	Re.	I	11	3.0	Rs. 1/12	,,	Rs. 2	24	6.0	
Rs. 1	,,	Rs.	1/2	20	5.0	Rs. 2	,,	Rs. 2/4	22	5.6	
Rs. 1/2	,,		1/4	A	1	Rs. 2/4	,,	Rs. 2/8	30	8.1	
Rs. 1/4	,,		1/8	6	1.7	Over Rs.	99	Rs. 2/8	20	5.0	
Rs. 1/8	,,		1/12	5	1.5						
Rs. 1/12	,,	Rs.		1	0.2		3004	is no strain-	385	100.0	
Over Rs. 2	,, F			15	2.2		als ri				
				385	100.0						

It will be seen that about 72 per cent. of the workers earn a daily basic wage of less than 12 as., the daily net earning less than Rs. 1-4-0 in the case of 39 per cent. of the operatives. The largest concentration of the workers is in the earning group Re. 1 to Rs. 1-12-0.

It was reported that all the three factories had increased the basic wage rates from 50 to 140 percent, increase of 50 percent being in the largest unit in Lahore. The factories which have given the higher increase in the basic wages pay no allowances but the third factory pays both a dearness allowance and what is called an index allowance. The dearness allowance is graded according to the income and is paid on the following scale:—

As. 5-0 per rupee for wages up to Rs. 19 p.m. As. 4-0 ,, ,, ,, ,, Rs. 20—50 p.m. As. 3-6 ,, ,, ,, ,, ,, Rs. 51—80 ,, As. 3-0 ,, ,, ,, ,, ,, Rs. 81—150 ,,

The index allowance is presumably based on the rates decided upon by the Employers' Federation at Cawnpore. This allowance, however, is conditional on the worker not remaining absent without leave. The rate is As. 6-6 per working day. This concern also pays an annual bonus equal to one-sixth (1|6) of the total wages earned in the preceding year in four equal instalments subject to certain conditions. It is reported that about 60 per cent. of the workers earn the bonus.

Housing.—One of the factories provides free housing for all the workers, while the biggest unit provides free housing for 25 per cent. of its operatives only. They are mostly one-room tenements and the conditions of ventilation and sanitation in them are none to good. It was reported that during floods some of the workers in these quarters were put to great hardship, as the flood water entered their tenements.

Welfare.—One of the factories maintains a dispensary with a part-time doctor attending twice a week. On the whole, so for as these factories are concerned medical aid appears to be inadequate. In all the three factories workers are given advances against their wages but even so, many of them appear to be indebted and have to pay high rates of interest on the money borrowed. There is no provision for the future of the workers made by any of these factories, such as the establishment of a provident fund, payment of gratuity, etc.

Special Problems.—The workers employed in the match industry at Lahore complained that, if they wanted to leave the service of their employer, they were refused a service certificate which they considered as a great hardship. They also stated that such of them as dared to represent their case to the management for an increase in their remuneration were apt to be discharged. They pleaded that no provision existed at present for safeguarding their future and suggested the establishment either of a system of pensions or Provident Fund.

CHAPTER VIII.—CENTRAL PROVINCES.

Employment.—The first match factory in the Central Provinces was started about the end of the last century at Kota. The industry has not made much progress in this province and there are at present only three units situated at Nagpur, Chanda and Kota employing 273 persons. For purposes of the present survey only the factories at Kota and Chanda have been covered. Both of these are very small units and employed 17 and 182 persons respectively at the time of Survey. In one of the factories the children employed appeared to be below the age of twelve.

Both at Kota and at Chanda the labour is mostly local. The Kota workers are agriculturists and work in the factory only to find a supplementary occupation. Labour is recruited direct and not through contractors. In the majority of cases the relatives and friends of workers get preference for employment. The Kota factory which is the longest established has very little labour turn-over and the majority of the employees have put in five or more years of service. In the Chanda factory also the turn-over is not large, although since it was only established in the year 1937, there are not many workers in it with more than five years' service. The main reason for the small turnover is that there are no alternative sources of employment in these two centres. Absenteeism varies from about 12 to 15

per cent. and is largely due to sickness caused by malaria.

Hours of work and shifts.—In one of these factories only one shift is worked while the other follows the relay system. In neither of the factories do the working hours exceed nine. Over-time is only occasionally worked. Neither of these factories is mechanised to any considerable extent. The working sheds are fairly well-lighted and ventilated although there is a certain amount of congestion in them owing to the tendency to dump the material required for the manufacturing processes in the sheds themselves. The arrangements for supplying drinking water are fairly satisfactory and so are those relating to urinals and latrines. At Kota, Monday is observed as a holiday being the bazaar day, while the factory at Chanda is closed on Sundays. In one of the factories monthly-paid workers get 21 days' leave in the year with pay, while in the other leave with pay is granted at the discretion of the management and amounts to about 15 days in the year. In neither of the factories are there Standing Orders for the operatives.

Wages and Earnings.—In both of these factories about 60 per cent. of the workers are on a time-rate basis. At Kota wages are paid every week while at Chanda the wage period is fortnightly. There are no undue delays

in the payment of wages.

A wage census of all the workers was taken for the month of March 1944 and the first week of March 1944 in the Chanda and Kota factories

respectively.

Owing to differences in the wage period and the nomenclature of occupations it is difficult to discuss the results of the census in these two factories. It is, however, seen that in the factory at Chanda the average daily earnings vary from about six annas to twelve annas. Women workers earn as little as four annas per day both at Chanda and at Kota. In Chanda the lowest wage earned for 12 working days was Rs. 3 only, the highest being Rs. 9-0-9.

The following table sets out the frequency of daily earnings in these two factories:

TABLE XIV.

Frequency table showing the earnings of workers, in two Match factories covered in Kota and Chanda, C.P.

Earning groups.					Toda	No	of workers.	Percentage
Less than 4 as.							45	19.2
4 as but less than	6 as.						95	40.4
6 ,, ,,	8 ,,		Burney .				42	17.9
8 ,, ,,	10 ,,	297.50		4.6	048.00	10.	24	10.2
10 ,, ,,	12						11	4.7
12 ,, ,,	14 ,,						. 8	3.4
14 ,, ,	1/-	0-4		••			1	0.4
							226	96.2

TABLE XIV-Contd.

Earning groups					N	o. of workers	Percentage
1/- but less than	Re. 1/2	4 2	79711	Brought fo	wad	226	$96 \cdot 2$ $2 \cdot 1$
1/2 but less than 1/2 ,, ,,	1/4			 	1	2	$0.\overline{9}$
1/4 ,, ,,	1/8 1/12	4500 1	Telline.	 n L		1	0.4
1/12 ,, ,, Over Rupee 2	2/-	d ib		 IO NEV L		1	0.4
Over Itapoe 2	***			10.24		235	100

It is clear from the table that 77.5 or nearly 78 per cent. of the workers in these factories earn under annas eight per day. Personal investigation on the spot revealed that even the most hard working and conscientious pieceworker in these factories cannot hope to earn more than annas ten

per day.

Neither of these factories gives a dearness allowance, but it is reported that they have increased the basic wage rates as compared to the pre-war period by about 100 per cent. One of these factories has a grain shop where rice and jowar are sold at half the market rates. The cost of the concession to the factory works out at about one anna three pies (0-1-3) per head per day. The factory at Chanda paid a bonus of two months' wages in 1944.

Housing.—At Kota about 75 per cent of the workers are staying in quarters provided rent-free by the factory management. Each room is about 10 ft. \times 9 ft. with a court-yard in front. They are pucca structures of bricks and tiles. Very little or no arrangement exists for sanitation. At

Chanda most of the workers live in their own huts.

General observations.—The size of the units as also the total number employed in the match industry in Central Provinces is so small as not to warrant much detailed discussion. It is, however, understood that there are certain evasions of the Factory Act in regard to attendance on holidays, payment for over-time, etc. In regard to maternity benefit also, there seems to be a certain amount of evasion because in one of the factories started in 1937, there has not so far been a single case of the payment of maternity benefit although the factory employs about 55 women. The wage level in these factories appears to be as low as the one prevailing in some of the South Indian centres such as, Sattur and Shivakasi. This is probably due to the plentiful supply of labour and the absence of alternative sources of employment.

(ii) Indian States. CHAPTER IX.—SHIMOGA—MYSORE STATE.

There was only one small match factory at the time of the enquiry in Mysore State which was situated in Shimoga town of the State. The number of persons employed is about 250. This is not a very highly mechanised concern and in some of the departments, such as box-filling and bandroling the work is given on contract on a piece work basis to women employees numbering about thirty.

The labour employed is mostly local. Recruitment is made by the Technical Chemist of the factory at the gate. There is no temporary or

substitute labour and all are regarded as being permanent.

Working conditions inside the factory can be regarded as being satisfactory and the surrounding atmosphere of the factory is clean and healthy. Only one shift is worked and the shift hours are 8.30 a.m. to 5 p.m. with an interval of half an hour.

Wages.—A wage census of all the workers in this factory was taken for the month of January 1944 and the following table contains the results of the census for principal occupations.

Table showing the wages and earnings in selected occupations in the Match Factory at Shimoga (Mysore State).

. Occupations.	Shift.	Sex.	No. of hours of work per shift.	Piece or Time rate.	No. of workers.	No. of samples taken.	Average daily basic wages earned.	Average daily gross earnings including overtime, allowances and bonuses. Rs. A. P.	Average daily net earnings including overtime, allowances and bonuses.	Actual average net carnings in the wage period.	Average Basic wages earned in the wage period by samples with full atten- dance. Rs. A. P.	Average net earnings in the wage period of samples with full attendance. Rs. A. P.	No. of working days in the wage period.
Carpenters	1st	Male	8	T	I	1	1 3 0	2 3 2	2 3 2	37 6 0			25
,,	**	"	8	T	1	1	1 1 0	1 4 9	1 4 9	28 8 0			25
Drivers	,,	,,	8	T	1	1	0 10 0	0 13 9	0 13 9	20 10 0	8		25
,, ., ., ., .,	"	,,	8	T	3	1	0 8 0	0 10 1	0 10 1	12 11 4			25
Splint Dresssers	"	Fem.	8 8	T T	3 5	3 5	0 8 0 0 5 0	6 10 10 0 8 4	0 10 10 0 8 4	13 12 8 12 9 0	7 13 0	12 12 0	25 25
Coolies	,,	,,	8	T	3	3	0 5 0	0 8 5	0 8 6	12 10 2	7 13 0	12 13 0	25
Box Section Helpers Log Pushers Filling Section Machine Drivers	Day	Male	8 8 8	T T T	14 10 14	10 14	0 7 10 0 8 3 0 8 5	0 10 11 0 11 10 0 11 8	0 10 11 0 11 10 0 11 8	13 5 0 14 3 7 15 13 10	11 14 0 10 15 0 12 3 10	16 4 5 16 3 0 17 3 10	25 25 25 25
Labelling Section Machine Driver	,,	"	8	T	8	8	0 5 8	0 8 6	0 8 6	10 7 0	9 0 0	13 12 6	25
Box Makers Dozen Packeteers Label Box Arrangers Bandroling & Hand Filling Sec))))))	Fem.	8 8 8	T T T	7 7 7	7 7 7	$\begin{array}{c cccc} 0 & 5 & 0 \\ 0 & 5 & 1 \\ 0 & 5 & 1 \end{array}$	0 8 3 0 8 2 0 8 4	0 8 3 0 8 2 0 8 4	12 10 9 9 0 0 11 3 10	7 13 0 7 13 0	12 13 0 12 13 0	25 25 No. F.T* 25
tion Total	,,	"	8	T	91	79	0 4 8	0 8 0	0 8 0	12 1 3	6 9 0	11 9 0	25

05

It will be seen that apart from skilled workers like carpenters, drivers etc., the daily basic wage rate for female labour is about annas five per day and annas six to annas eight for males, the average daily earnings including allowances being annas eight in the case of females and about annas 11 to annas 12 in the case of males. Out of the 25 working days in the census month the average attendance was found to be 19.5.

An examination of the frequency* of earnings in this factory shows that nearly 83 per cent. of the operatives were in receipt of under annas 12 per day.

If is reported that as compared to the pre-war period there have been considerable alterations in the structure of the basic wages and the increases given amount to about 40 per cent. of the basic rates.

Dearness allowance is paid at the rate of Rs. 5 to those earning Rs. 50 and below per month and at the rate of Rs. 7-8-0 per month to those with an income of Rs. 50 to Rs. 80 and at the rate of Rs. 8 to those earning between Rs. 80-0-0 and Rs. 100 p.m.

A bonus at the rate of one month's wages was paid to all those who had put in at least 75 days' attendance in a year in 1943.

The wage period is a month and the period elapsing between the date on which wages become due and are paid is about a week. The employees are allowed two days' paid holiday in the year and there is also a system of granting 14 days' privilege leave to all daily-rated workers on the completion of 12 months' service.

Housing.

As the labour force in this factory is mostly local or drawn from surrounding villages, it has not been found necessary by the management to supply any special housing accommodation to employees.

Welfare work.

There is a canteen in this factory run by a contractor. The management supply the building and the utensils free of charge. It would appear that apart from arrangements made for rendering first-aid, no special medical facilities are supplied to the workers in this factory.

There is a scheme of Provident Fund in this factory to which the employers and employees contribute one anna per rupee per month of the employee's earnings. Only those earning annas twelve per day are allowed to subscribe. Those who are not allowed to subscribe to the Provident Fund are entitled to a Service Gratuity after 15 years' service at the rate of a month's salary for every year of service.

CHAPTER X.—BARODA.

There is one small match factory in Petlad in Baroda State. The Committee's staff has made no ad hoc survey in this factory but the following information has been obtained through the courtesy of the Acting Director of the Department of Labour, Baroda.

The factory was established in the year 1930 and employs about 230 persons. Part of the labour force is employed through contractors but paid directly by the factory. There are no Standing Orders for operatives.

The hours of work in this factory are ten, the spread-over being 11. Only a single shift is worked.

The working conditions inside this factory are, it is reported, satisfactory. A rest shelter has been provided for the workers which measures $80 \text{ ft.} \times 50 \text{ ft.}$

Wages and earnings.—The average earnings of the least skilled workers such as coolies, including allowances, appear to be about Rs. 24 per month, the minimum basic wage varying from Rs. 10 to Rs. 13 per month in the case of coolies.

The factory is paying a dearness allowance at four annas per day to its workers.

There is no system of fining.

Wages are paid monthly on the 9th of the following month. The factory is closed on four days in the month and in addition, the workers get holidays on certain festivals.

Housing.—As the workers in this factory come from adjoining villages, no provision has been made for housing. All the workers stay in their own homes.

Welfare work.—The factory has no dispensary for the work people but patients are sent to private practitioners or to the Government hospital. It runs a canteen on a non-profitable basis and refreshments are sold at a price of about 25 per cent less than the market price. There is a creche in the factory. No special facilities are provided for the education of the workmen's children. The factory runs a grain shop where commodities are sold at cost price or at controlled rates, whichever is less.

PART III.

CHAPTER XI.—SUMMARY AND CONCLUSIONS.

The Match Industry is, comparatively speaking, of very recent origin and growth. The number employed in it is about 16,000 only and as such it cannot be considered as one of the principal industries of the country. At the same time it provides the State with an income of nearly five crores of rupees per annum by way of excise revenue. It has also certain special features. For instance, as a result of protection even before the War the imports of matches had diminished to almost nil and the requirements of the whole country are being met to-day by the local manufactures. matches are also making gradual incursions in foreign markets. Secondly, although there are 150 odd match factories in the country, nearly 80 per cent. of the production is contributed by six or seven factories belonging to a single combine, namely, the Western India Match Company, an Indian public limited company with rupee capital but largely controlled by mon-Indians (including the Assam Match Company which is a sister company of the The industry also presents a study in contrast in so far as equipment of the factories, managerial skill and ability and labour ditions are concerned. At one end we find highly mechanised concerns with the most up-to-date machinery, managements possessing the highest technical qualifications and speaking generally, fair conditions of labour and on the other, godowns and sheds called factories in which the only machinery is a few simple gadgets, managers who are no better than untrained clerks and totally sweated conditions of labour with long hours and low wages.

In part II of this Report the conditions of work and wages in the 20 factories surveyed for purposes of the present enquiry and employing about 8.400 workers or about 52.5 per cent. of the total employed in the industry have been described in some detail. It remains now only to summarise the results.

No reliable and up-to-date statistics relating to the number of match factories and the number employed in them are available, but it would appear

that since 1939 there has been a rise in the number of factories from 113 to 150 in 1945. The total volume of employment in the industry has, however, remained the same, viz., about 16,000 employees.

Nearly half the workers in the industry are on a piece-work basis. There is little employment of women and children except in the factories in the South and in the Central Provinces. In the bigger units of the industry the turn-over of labour is small; nor is the percentage of absenteeism high. Except in the South where home workers are given work on a piece-rate basis, all labour is employed and paid directly by the employers. There are no Standing Orders for operatives except in the WIMCO's factory at Bareilly.

On the whole, the working conditions inside the match factories are satisfactory. Due attention is paid to lighting and ventilation in the larger factories and in the smaller units as there is not much machinery the conditions of work are not too unpleasant. While, however, the larger units have made fairly adequate arrangements for the supply of drinking water, sanitation, etc., the same cannot be said of the smaller units of the industry. The provision of rest shelters, créche etc., is the exception rather than the rule.

The hours of work are usually 9 per day. In some cases, 10 hours are worked on week days and Saturday is observed as a half holiday. Generally only one shift is worked. There is no system of multiple shifts except in the WIMCO Match Factory at Ambernath.

There has been no radical alteration in the basic wage structures of the industry although, owing to the shortage of unskilled labour the daily rates of wages of coolies etc., have been increased in many cases since the War.

There is no standardisation of wages in the industry; nor does one find the same rates of wages in the different units belonging to the WIMCO. The nomenclature of occupations varies from factory to factory and it is a matter of considerable difficulty to compare the wage rates and earnings in different occupations of the industry. The only manner in which this can be done is by comparing the wages and earnings groups in the different factories. The data collected during the Wage Census already referred to have been tabulated according to wages and earning groups and are given in Appendix VI (a) and (b). The following frequency* table showing wages and earnings in Match factories is of interest.

It will be seen that the highest wage rates are to be found in Bombay, Madras and Bareilly. Quite a large percentage (or 43 per cent. of the total) of the workers in Calcutta are in the wage group of annas twelve and below. In Mysore, Central Provinces and Ramnad district of Madras Presidency, almost the whole of the labour force has a basic wage below annas 12 per day.

Owing to the high rate of dearness allowance prevailing in Bombay, as many as 58.6 per cent. of the workers there have a daily earning of Rs. 2 and over. In Lahore the percentage of such workers is 18.7. The earnings figures for Madras must be viewed in the light of the fact that the workers get a substantial portion of the dearness allowance in kind which explains why in spite of high wage, there are not many workers in the earning category of Rs. 2 and over per day.

There is no uniformity either in regard to the policy or the scale for the payment of dearness allowance in the industry or even as between different units in the same centre or in units in the different centres belonging

TABLE XVI.

Frequency Table showing the average daily basic wages and Earnings of Workers employed in 20 Match Factories surveyed in 8 centres in India.

		I	Below as	nnas 12	}	As. 15	2 but les	s than l	Re, 1	Re. 1	but less	than R	s. 1/8.	Rs. 1/	8 but le	ess than	Rs. 2	Ra	. 2 and	over.	
		Basic w	rages.	Earni	ings.	Basic	wages.	Earn	ings.	Basic	wages.	Earn	ings.	Basic	wages.	Earn	ings.	Basic	wages	Earn	ings.
Centres.	io	No. of work- ers.	% to total.	No. of work-	% to total.	No. of work- ers.	% to total.	No. of work- ers.	% to total.	No. of work-	% to total.	No. of werk- ers.		No. of work- ers.	%to total.	Nc. of work- ers.	% to total.	No. of work-ers.	% to total.	No. of work-	% to total.
Bengal (Calcutta)		872	43.1	251	12.5	221	11.6	639	31.9	618	30.7	297	14.8	276	13.7	562	28	19	0.9	257	12.8
Bombay	.:	177	12.6	147	10.4	512	36.2	59	4.2	612	43.2	76	5.4	75	5.3	303	21.4	38	2.7	829	58.6
Madras (a) Tiruvattiyur	1.	6	0.9			132	19.0	10	1.3	499	71.9	409	60.0	50	6.9	233	33.1	10	1.3	45	5.6
(b) Ramnad		530	99.6	524	96.6	2	6.4	18	3.0			2	0.4					••			
United Provinces (Bareilly)		111	24.1			251	53.7	2	0.8	105	22.0	148	31.5	1	0.2	313	66.7			5	1.0
Punjab (Lahcre)		271	71.9	30	7.7	67	17.5	16	4.6	26	6-7	158	43.3	6	1.7	109	26.3	15	2.2	72	18.7
Central Provinces		217	92.4	217	92.3	9	3.8	8	3.5	8	3.4	8	3.4			1	0.4	1	0.4	1	0.4
Mysore State (Shimoga)	••	192	88.9	179	82.9	15	7.0	18	8.3	8	3.7	13	6.0			2	0.9	1	0.5	4	1.9

to the same company. Thus, at Ambernath, in the WIMCO factory, dearness allowance is paid at the rate of nearly Rs. 30-0-0 per month to all the operatives, while in the Madras factory belonging to the same management only a nominal cash daily allowance of anna one and four pies (0-1-4) per rupee is paid and the rise in the cost of living is mainly met by supplying food grains etc. to the workers at pre-war rates. Some factories pay no dearness allowance at all, while yet others pay as low a dearness allowance as annas two per rupee of earning.

Except at Ambernath in Bombay and at Lahore where the WIMCO Company houses about 30 per cent. of its labour, the industry as such has done little for housing its employees as only about 10 per cent. of the labour is accommodated in the quarters built by the employers in the industry. It should, however, be remembered that in some centres like Madras, the workers who come from the adjoining villages prefer to stay in their own village homes. At the same time in some centres like Calcutta, Lahore, Bareilly etc. in the absence of provision for housing accommodation by the employers the workers are forced to live in dingy private tenements and to pay very heavy rents. The need for employers housing is thus fairly acute in this industry. It is understood that already some of the employers are planning extensions of their housing schemes but that these schemes have had to be held in abeyance because of the unavailability of building material etc. at reasonable prices.

The standard of housing accommodation provided by the employers varies from centre to centre. For instance, at Bareilly and Kota the housing conditions appear satisfactory. On the other hand, in centres like Lahore, they leave considerable room for improvement both in regard to the accommodation supplied, ventilation, sanitation etc. Except at Kota in the Central Provinces where all the workers are housed free of rent, the workers in other centres are charged rent which is generally lower than what they would have to pay for similar accommodation provided by private

landlords.

The following summary table gives the percentage of workers housed by the employers in the different centres covered, which may be of interest:

TABLE XVII.

		Ce (1	entres.		U	No. of nits coverd.	No. of workers in Units in column 2.	Percentage of workers housed by employers. (4)
Calcutta						5	2,412	Nil.
Bombay						3	1,497	30.83
Madras (i			ad and Sh	imoga)		4	1,582	5.30
Assam						1	1,001	2.0
Bareilly, T	J. P.					1	1,078	15.0
Lahore (P						3	385	30.90
Central Pr						2	199	5.50
Baroda	,					1	230	- · ·
-						20	8,384	10.1

With the exception of the factory at Ambernath in Bombay, the industry as such seems to lag considerably behind some other industries in the country so far as the standard of welfare work is concerned. Beyond the provision of a dispensary and a grain shop and occasionally of a school and a canteen, welfare activities in the industry do not seem to travel further. Nor has adequate provision been made for safeguarding the future of the workers except in the factories at Bombay and Shimoga where a Provi-

dent Fund has been instituted and there is also a system of paying a Service Gratuity. The WIMCO factories at Bombay and Calcutta have a Provident Fund for their employees but the fund is either open to monthly rated workers or to those earning over a certain amount and thus the majority of employees remain outside the purview of these funds. In this connection the Assam Provident Fund Scheme has much to commend itself. It would appear that at least the well-established factories in the country must immediately consider the possibility of starting schemes for safeguarding the future of the workers and ensuring that such schemes embrace the bulk of their operatives.

Only in the factories at Ambernath, Madras and Bareilly are there full-time and well-qualified Labour Officers.

Trade Unionism in the industry is extremely weak and except for the Union of the workers in the factory at Madras no other Match Workers' Union appears to have been recognised by the employers.

Whether one sees match workers operating complicated machines or working on simple gadgets or making match boxes with their own hands, one does not fail to notice their alertness, skill and dexterity. And it is gratifying that this has been recognised by the leading employers in the industry as will be seen from the following extract from an article* on the subject:

"A great advantage enjoyed by factory managers in India is the abundance of cheap labour which can be trained by expert supervisors to operate the various intricate machines efficiently and keep them functioning smoothly....

In well-organised plants, the employee-production ratio is satisfactory even in comparison with European industrial standards. It has been roughly computed that were all-India's needs met by a series of modern and efficient factories, the total number of hands required would not exceed 8,000 to 10,000 ".

This highly protected industry has the necessary raw material locally available: it has an abundant supply of cheap and efficient labour and its future is therefore assured. Taking its sheltered position into consideration, it cannot be said that the industry as a whole is giving an entirely fair deal to its labour. In the smaller units of the industry specially, there is very large room for the improvement of labour conditions. Presumably such units are finding it difficult to compete with so powerful a combine as the WIMCO with its highly mechanised factories and already the process of disintegration of such factories had started even before the present War. While it is of the utmost urgency that conditions of work and wages in such factories should be improved, steps must, at the same time, be taken to that between what seems an unequal battle between machine and man, they are not allowed to languish and to die. For, taking into consideration the economic background of the country, particularly in the South, their extinction may mean unemployment and destitution not only for the thousands they directly employ but also for many hundreds of families of cottage workers, who are partially dependent on them for their livelihood.

S. R. DESHPANDE,

Simla, 11-6-45.

*Article on "The Match Industry in India" contributed by the Western India Match Co., Ltd., Bombay, to the Dictionary of Economic Products and Industrial Resources of India and reproduced in the Journal of Scientific and Industrial Research, July 1944—page 32.

APPENDIX I.

Statement showing the number of Match factories in British India and the number of persons employed in them from 1931 to 1943*.

The state of the s										
Year.	Madras.	Bombay	7. Bengal	. U.P.	Punjab.	Bihar.	C.P.	Assam.	Dəlhi.	Total
1931	1	13	13	2	1		1	1		3:
	997	4697	5282	885	137		124	410		12532
1932	1 642	13 5124	14 5092	1 643	1 171		132	1 333	• • • • • • • • • • • • • • • • • • • •	32 12167
1933	1 548	12 4653	13 4991	1 665	2 197		1 100	1 336		31 11490
ec vi					10.					
1934	1	12	16	1	2		2	1		35
	724	5395	6059	607	279 		206	419	:.	13689
1935	2	14	20	I	3		2	1	1	44
	667	5950	6333	901	409		203	377	34	14874
1936	5	9	20	2	4		2	1	1	44
	857	4416	5560	1120	462		197	363	168	13143
.937	72	7	17	3	2		3	1		105
	3218	2703	4899	1163	374		230	311		12898
938	52	6	17	6	2		3	2		88
	2758	2439	5400	1166	237		202	468		12765
939	48	7	16	6	2	7.2	3	3		85
	2888	2264	4728	1074	367		114	595		12030
940	66	6	17	3	3		2	3	1	101
	3520	2087	4062	935	394		69	587	90	11744
941	62	6	16	4	3	4.36	3	2	1	97
	3239	1999	4628	975	349		151	583	90	12014
1942	66	4	9	3	3		2	1	1	89
	3188	1507	2230	937	375		199	657	38	9061
943	67	4	9	2	3	1	3	1		90
	3349	1740	2574	1013	366	262	183	925		10412

^{*} From 'Statistics of Factories'.

APPENDIX II.

Statement showing the maximum and minimum daily rates of wages in the Western India Match Co. Ltd. Madras.

Power House, Workshop & Yard.

											1 - 1	-			
Serial No.	Class of Worker.						Max	Rate	es o	f da	aily '	wag	es. Min	imu	m.
1	Engine Driver						2	0	0				1	12	0
2	Fireman					• •	1	11	0				1	9	0
3	Pipe Fitter									2	2	9			
4	Boiler									1	13	3			
5	Mason									1	10	9			
6	Turner						2	2	9				1	12	6
7	Shaper					• •				2	5	6			
8	Tinker									1	10	3			
9	Blacksmith									2	12	6			
10	Hammer Man		198							1	4	6			
11	Fitter						2	6	0				1	8	6
12	Carpenter						2	0	6				1	0	0
13	Apprentice						1	4	0				0	12	0
14	Cooly						1	4	0				0	12	0
							20								
	Box-j	filling, E	Banderollin	g, Labell	ing & Pa	скіпд									
1	Fitter						1	10	0					2 5	0
2	Chemical Grinder]	5	3			
3	Transporter					• •				(14	3			
4	Paper Cutter				••	• • •					1 8	0			
5	Paper Cutting Helpe	er								-	0 14	8			
6	Sweeper									(0 13	6			
			Box-makin	a and Ro	x-elosina	Depo	ırtme	ents.							
			13000-1110010010	g www 130											
1	Turner	• •	"- 1	**							2 2	9			
2	Fitter						1								5
3	Sweeper						0	11	0					0 13	3
			Peeling	and Leve	lling Depe	artme	ents.								
- 61	7711		- 0					2 2	0					1 1	E
	l Fitter						-	ک, د	, 0		2	2 9		11	5
	2 Grinder		••	.,							1 14				
	3 Saw Filer	••						16			1 1	* (,	0.1	,
	4 Sieving Boy							12	2 9		,	0		0 1	1
1	5 Drum Cleaner						L III				1	2	3	111	
8	La Land		Co	ntinuous	Departme	ent					i				
8	l Fitter							1 14	5 8)				1	4
13	0.0036										1	7	9	1	
	2 Oil Man 3 Chemical Grinder							1	3	9	4.5		15	0	13
6		* 11	3634 13					-126	2,1		0 1	3	6		
	4 Sweeper	• •									-	-	*		

Piece Rate Earnings per day of 9½ hours.

December 1943.

	COMIDET 1949.		
Joh	Piece Rate Unit.	Actual	Actual
		Capacity	Earning
	Pies	per day.	per day
Characteristics Washing Washing			Rs. a. p.
Halmana	1.19 Cony. layer	432	1 7 0
Splint Pagling Machine Man	2·22 6·19 Layer	56.5	1 6 0
Aggistant	5.16	90.9	1 13 0
	4.44 ,,		1 5 0
Splint Chopping	5.16 ,,	45	1 3 3
Splint Drying	Imprognation 3 · 10 10 Trays	00	20.2
Splint Levelling	3.10	62 81	1 0 0
Packing in Bags 1/2 size	14 44 D	0.0	1 5 ()
Packing in Bags 1/1 size			
Fooder	0 50	91	1 8 3
Receiver	9.99		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Table Man	0.10		1 2 0
Paraffin Man	0.413	596	1 4 6
Outside Veneer Peeling Machine Man Assistant		89	1 12 9
Boys.	$3 \cdot 10$,, $2 \cdot 84$		1 7 0
Rims Veneer Peeling Machine Man	4.90 ,,	62	1 5 0
Assistant	4.13 ,,		1 5 3
Boys Bottom Veneer Peeling 1/2	3.82 ,,		1 3 9
Size 1 m/m Machine Man.	9.90 ,,	43	2 3 6
Assistant	8.25 ,,		1 13 6
Boys	6.19 ,,		1 13 6
Bottom Veneer Peeling 1/1 Size 1 m/m Machine Man.	7.74 ,,	47	1 14 6
Assistant	6.40		
Boys	4.85 ,,		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Outside Veneer Choping Machine Man	0.98 ,,	284	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Helpers	0.78		1 2 6
Dyeing	0·83	284	1 3 6
Bottom Veneer Chopping	2.32	78 113	1 8 9
Waste Transport in Peeling Dept	2.07 Cony. Layer	97	1 6 0
Transport of Billets & Rollers Inner Bex Making H50	1.20	162	1 0 0
Inner Box Making Hb()	12·90 Basket 7·74	20.25	1 5 9
Outer Box Making H50	6.71	31·5 37	1 4 6
060	4.28	59	1 4 6
Deg Deving		-	
Box Drying Transport in Box Making	11.76 50 Gross	21	1 4 6
Box Closing H50 Machine Man & Receiver	1.09 Tray	$\frac{21}{210}$	1 4 6
Inner Box Feeder	0.87	210	1 3 3 0 15 3
Box Closing O60 Machine Man & Receiver	0.98	240	1 3 - 6
Transport in Box Closing	0.79 4.85 50 Gross		0 15 9
Waste Stick Levelling	6.19 Tray	47·5 38·5	1 3 3
Box Filling H50 6-cup Machine Man	1.16 ,,	010	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Helpers	0.85 ,,	24 0	1 1 0
Stick Arranger	0·50 1·37 "	000	1 4 0
Helper	0.92		1 10 3
Stick Arranger	0.65 ,,	2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Transport in Box Filling	3.51 50 Gross	63	1 2 6
Transport of Stick trolleys Banderol Pasting Machine H50	1.14 ,,	190	1 2 0
060	3.00 Basket 1.86	77 1 123 1	
Banderolling & Labelling Machine 060	1.29 Tray	123 1 170 1	
		102000	70

Job.	apples	Piece Rate. Pies.	Unit.	Actual capacity per day.	Actual earning Per day.	
					Rs. a. p	3.
Banderol Cutting		1.24	50 Gross	190	1 3 6	
Banderol Powdering etc		5.88	,,	37.7	1 2 9	9
Transport in Banderoling		1.04	50 gross	190	1 0 6	3
Transport in Banderoling		2.94	,,	190	0 15 6	3
Box Labelling H 50 Feeder		1.59	Tray	136	1 2 0)
Box Labelling H 50 Receiver		1.45	,,		1 0 6	3
Box Labelling O60 Feeder		1.17	19	185	1 2 6)
Box Labelling O60 Receiver		1.07	,,		1 0 6	6
Paste Transporter Labelling Dept.		0.98	,,	190	0 15 6	6
Checking of labelled boxes		3 22	10 Trays	47	0 15	3
Frictioning Machine Man		3.92	50 Gross	70	1 6 9	9
Feeder & Receiver		14.65	,,	210	1 5 3	3
Transport from checking to frictioning		1.14	,,	190	1 2	0
Packing Loose Boxes-		a standard				
Single ocean		12.00	,,	28	1 12	0
Double ocean & Single Hessian		14.00	,,	25	1 13	0
Cutting, Marking & Transport		7-22	,,	190	1 6	9

APPENDIX III.

List of Commodities supplied to workers by The Western Inara Match

Co., Ltd. Madras.

Articles.	Articles.
Asafoetida	Kambu
Atta flour	Karamani
Bengal Grave Whole	Leaves
Betel Nut	Match Box
Butter	Mustard
Caraway	Oil Cocoanut
Cardamom	Oil Gingelly
Cashew Nuts	Oil Ground Nut
Castor Oil	Oil Lamp
Cheeka	Pepper
Chillies	Poppy Seeds
Cinnamon	Raggee
Cloves	Rice Boiled
Coffee Seeds	Rice Raw
Coriander	Rice Broken R.
Cummin Seeds	Roilong
Dill Seed	Salt
Dholl B. Gram	Scented Oil
Dholl Black Gram	Soap " 501 " Bar
Dholl Green	Soap Toilet
Dholl Tur	Sugar Java
Eucalyptus oil	Sugar Brown
Flour American	Saffron
Garlie	Tamarind
Ginger Dried	Tea Dust
Jaggery	Wheat
Jaggery Palmyrah	Whole

APPENDIX IV.

Terms of tenancy in the Factory of the Western India Match Co., Ltd. Madras

.....QUARTERS.

The Western India Match Co., Ltd., (hereinafter called the Company) hereby grants to (hereinafter called the Licensee) liberty and license to occupy room No. in Block No. on the terms and conditions following, namely:—

1. The Licensee will pay a licence fee of Rs. monthly in respect of the room occupied by him and such licence fee may be deducted by the Company monthly from the wages, salary, or other monies due by the

Company to the Licensee.

2. The Licensee shall not assign, let or part with possession of the said room, or any part thereof, and shall not take in any lodger without the written permission of the Company, and the room shall be used for residential purposes only.

3. The Licensee shall keep the room in a clean and sanitary condition.

to the satisfaction of the Company or its Medical Officer.

4. The Licensee shall make good any damage caused to the room while in his occupation, and whether caused by him or any other person residing therein fair wear and tear only excepted.

5. The Company and its Medical Officer and any other duly authorized official of the Company shall be entitled at all times to enter the room

occupied by the Licensee for any and every purpose.

6. The Company shall be at liberty to revoke this license at any time without notice and without giving or being liable to give any reason therefore to the Licensee and thereupon the Licensee will forthwith hand over to the Company vacant possession of the room.

7. The Licensee will observe and comply with such other Rules and Regulations relating to the occupancy of the room as may from time to

time be made by the Company.

THE WESTERN INDIA MATCH CO., LTD.

Madras Factory Manager.

(Signature of Licensee)

APPENDIX V.

Statement of comparative maximum and minimum basic wages per fortnight per worker in 1939 and 1945 in the Assam Dhubri Factory.

		F	ebru	ary	194	45.			Fo	bru	ary	198	9.		
Department and oc	cupation.	No. of machine		xim vage		Mir	nim vage		No. of machine		xim /age			nim age	37
		men in both shifts.							men in both shifts.						
Log Transport Gross Cutti	ing.	 8	13	0	0	13	0	- 0	3	12	3	0	12	3	0
Driver		 2	28	3	- 3	28	3	3	1	15	12	0	. 15	12	0
Helpers		 10	26	9	-9	26	9	9	3	14	12	0	14	12	0
Splint Pee	ling.														1
Drilver		 4	35	9	0	29	9	0	1 -	19	3	0	16	3	0
Helper		 8	27	14	0	22	12	0	2	15	0	0	12	1	0
Splint Chopping Split Drying	::	 } 8	30	7	0	30	7	0	3	16	8	0	12	8	0

in the form of the second				10		1.7.1	-		-			0.0	- 1	HC1
		Febru	ary	19	45.				Febr	ruar		39.		
Department and occupation.	No. of machine men in both shifts		imu iges		Min wa	imi iges	3.	No. of machine men in poth shifts.	W	xim			inin vege	
Outer Veneer Peeling.											-		1	
Driver	2	27	1	0	22	0	0	1	24	6	0	20	6	0.
Helper	4	21		0		12	0	$\overline{2}$	19	0	0	15	0	0
Rim & Bottom Veneer Peeling.														
Driver	2	33	5	0	28	2	0	1	20	6	0	16	6	0
Helper	4	30	14	0	25	10	0	2	16	4	0	12	4	0
Outer Veneer.														
Chopping	2	25	3	0	21	2	0	1	21		0		10	0
Rim & Bottom Chopping	2	36	6	0	31	2	0	1			0		11	0
Splint Levelling Frame Filling	$\begin{array}{c} 6 \\ 40 \end{array}$	$\frac{20}{22}$	7	0	16 17	4 5	0	2 11	16 17	14	0	12 12	14	0
Dipping Paraffining	10	42	0	0	37	2	0	4	17	10	0	12	0	0
Inner Box Making	40	21	7	0	16	4	0	15	16	4	0	12	4	0
Outer Box Making	30	19	8	0	14	5	0	10	15	4.	0	12	4	0
Box Closing.														
Driver	26	16	1	0	13	4	0	10		12	0		12	0
Helper	26	14	6	0	11	8	0	10	15	0	0	11	0	0
Box Arrangers	26	13	0	0	10	0	0	10	12	7	0	10	7	0
Box Filling.									-135		4			-
Driver	30	19	14	0	15	12	0	12	17	10	0	12	10	0
1st Helper	$\frac{30}{30}$	$\begin{array}{c} 13 \\ 12 \end{array}$	0	0	10	1	0.0	$\begin{array}{c} 12 \\ 12 \end{array}$		8	0		8 13	0
Frame Emptying	12		14	0	18	2	ő	4	17	2	ŏ	15	2	0
Banderolling.														
Feeder ; ;.	10	14	7	0	10	4	0	5	15	1	0	10	1	0
Banderoller	40	16	4	0	12	2	o	20	15	14	0	10	14	0
Box Labelling	20	19	0	0	15	1	0	10	17	4	0	12	4	0
Frictioning	6	23	7	0	23	7	0	3	19	8	0	14	8	0
Drying Marking, Packing, Nail- ing Iron Hooping, Lining														
Transport of empty cases and														
packed cases to godown	12	24	6	0	24	6	0	4	10	5	0	10	5	0
24 a. Dozen packing by m/c								2	17	9	0	17	9	0
25 a. Gross packing Case nailing			• •		-	••		2 2	18 10		0	10	14 13	0
	••		•••					4	10	10	,	10	10	J
Case Board.														
Transportation of shooks Rack-saw cross cutting	4.4		• •							• •			• •	
Split saw & planning m/c														
Driver	8	[24		0	20			4	15		0	10		0
Helper	8	20		0	16			4 5	13		0	10		0
Transporter	10	23		0	18 20			2	14 15	_	0	$\frac{10}{10}$		0
Helper	C	20	6					2	13		0	8		ŏ
M/c Driver and cutting	4	20	6	0	16	6	0	2	13		0	8	0	0
M/c Driver edge cutting	0	23						1	13		0	8		0
Helper General rate for coolies and trans-		17	1	0	12	1	0	1	10	13	0	ð	13	0
porters Rs. 0-11-0 per day.														
Fitters and carpenters on daily														
rates varying from As. 11.0 to														
Rs. 3-2-0.														

In addition to these there are coolies, transporters, sweepers, etc., numbering 500, who are paid at the rate of -|11|- per day. Godown coolies are paid at As. -|13|- to Rs. 1|2|-. In 1939 also the same rates were paid.

ΛΡΡΕΝDΙΧ VI (a).

Frequency Table showing Average Daily Basic Wages of workers employed in 17 Match Factories in 8 centres in India covered by the wage Census.

	Bombay.		Calcu	Calcutta.		Madras.		Ramnad.		Lahore.		Bareilly.		C.P.		Mysore.		All centres.	
Wage groups.	No. of workers.	Percentage.	No. of workers.	Porcentage.															
Less than 4 as							159	29.8	7	1.7		1-00	45	19.2			182	3.1	
4 as. but less than 6 as.	18	1.3	113	5.6			200	27.6	1	0.2		1	95	40.4	55	25.5	493	8.3	
6 as. but less than 8 as.	86	6.1	176	8.8			157	29.5	19	5.0	2	0.8	42	17.9	75	34.7	552	9.3	
8 as. but less than 10 as	58	4.1	309	15			12	2.3	165	42	66	14.1	24	10.2	38	17.6	689	11.6	
10 as. Lut less than 12 as	15	1.1	274	13.7	6	0.9	2	0.4	79	23	43	9.2	11	4.7	24	11.1	460	7.7	
12 as. but less than 14 as	:38	23.9	162	8:7	70	10	1	0.2	56	14.5	51	11.8	8	3.4	9	4.1	694	11.7	
14 as. but less than Re. 1	174	12.3	59	2.8	62	9	1	0.2	11	3.0	200	42.6	1	0.4	6	2.8	513	8.6	
1 Re. but less than Rs. 1/2	: 110	: 7.8	: 81	:4;(178	25.4	: :.	1.2	20	:5:0	32:	6.7	5 . 5	2.1	2	0.9	428	7.2	
1/2 Rs. but less than Rs. 1/4	171	12.1	63	3.1	219	21.4		••		••	69	14.5	2	0.0	1	0.5	527	8.8	
1/4 Rs. but less than Rs. 1/8	331	23.3	474	23.6	102	15.1			6	1.7	4	0.8	1	0.4	5	2.3	923	15.5	
1/8 Rs. but less than Rs. 1/12	70	4.9	179	8.9	38	5.4	4		5	1.5	1	0.2	ā !				293	4.9	
1/12 Rs. but less than Rs. 2	5	0.4	97	4.8	12	1.5			1	0.2			••	•••			115	1.9	
Over Rupees 2	38	2.7	19	0.9	10	1.3			15	2.2	••		Ĩ	0.4	1	0.5	84	1.4	
Total	1,414	100	2,006	100	697	100	532	100	385	100	468	100	235	100	216	100	5,953	100	

44

APPENDIX VI (b)

Frequency Table showing Average Daily Net Earnings earned by workers employed in 20 Match Factories in 8 centres in India covered by the Wage Census.

Earnings. groups.	Bombay		Calcutta.		Madras		Ramnad.		Lahore.		Bareilly.		C.P.		Mysore.		All centres.	
	No. of workers.	Percentage.																
Under 8 as.	18	1.3	111	5.5			467	87.78	10	2.7			183	77.8	8	3.7	793	13.4
Eas. but less than 12 as	129	9.1	140	7.0			47	8.83	20	5.0			34	14.5	171	79.2	537	9.0
12 as. but less than 1 Re	59	4.2	639	31.9	10	1.3	16	3.01	16	4.0	2	0.8	8	3.5	18	8.3	771	12.9
1 Re. tutless than 1/4 Rs.	64	4.5	127	6.3	206	30.0			95	27.3	59	12.3	7	3.0	10	4.6	568	9.6
I /4 Rs. but less than 1/8 Rs.	12	0.9	170	8.5	203	30.0	2	0.38	63	16.0	89	19.2	1	0.4	3	1.4	543	9.1
1/8 Rs. but less than 1/12 Rs.	16	1.1	219	10.9	207	30.1			85	20.3	226	48.2	1	0.4	2	0.9	756	12.7
1/12 Rs. but less than 2 Rs.	287	20.3	343	17.1	26	3.0			24	6.0	87	18.5					767	12.9
2 Rs. but less than 2/4 Rs	193	13.6	137	6.8	5	0.6			22	5.6	4	0.8			3	1.4	364	6.1
2/4 Rs. but less than 2/8 Rs.	250	17.7	105	5.2	15	2.0			30	8.1	1	0.2	1	0.4	1	0.5	403	6.8
Over Rupees 2/8	3 86	27.3	15	0.8	25	3.0			20	5.0							446	7.5
																		1
								-						-				-
Total	1,414	100	2,006	100	697	100	532	100	385	100	468	100	235	100	216	100	5,953	100

4

SELECT BIBLIOGRAPHY.

- 1. Report of the Indian Traiff Board regarding the grant of protection to the Match Industry, 1928.
- 2. The Location of Industry in India published by the Office of the Economic Adviser to the Government of India.
- 3. "The Match Industry in India"—Article contributed by the Western India Match Company, Ltd., Bombay, to the Dictionary of Economic Products and Industrial Resources of India and reproduced in the Journal of Scientific and Industrial Research, July, 1944.
 - 4. "The Indian Match Industry"—Article published in 'Capital'.